# CONTINUING EDUCATION AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

# Course and Offering Registration Form

American Speech-Language-Hearing Association Continuing Education Registry

Before completing this form ... did you know that you may submit course registrations online? Go to: <a href="https://www.goeshow.com/asha/registration/2011/index.cfm">https://www.goeshow.com/asha/registration/2011/index.cfm</a>.

**Cooperative Offering Payment Information** (If applicable, otherwise proceed to page 2) In accordance with the Payment Card Industry (PCI) Data Security Standard, ASHA has revised its credit card procedures to enhance the security of customers' sensitive payment card information.

If a Course and Offering Registration Form includes credit card information, do not fax the form. <u>Instead</u>, either mail it or use the online submission process.

Instructions: To mail a Course and Offering Registration Form with a payment for a cooperative offering fee;

- Complete the Course and Offering Registration Form including page 1.
- Include the nonrefundable cooperative offering fee.
- Mail Course and Offering Registration Form and payment to

Continuing Education **ASHA** P.O. Box 1160, #340 Rockville, MD 20849

Provider Code: AAYJ	
Provider Name: JDVAC 2012 Embacing Innovation: Thinking Outside the Booth	
Course Number: 1342	
Total Payment (credit card or check): \$ 250.00	
Check (check number):	
✓ Credit Card (MasterCard, Visa, or Discover) Discover	
Credit card number: 6011005062701985	
Expiration date: 03/2015	
Name as it appears on card. Christopher M. Galizio	

# A S H A C O N T I N U I N G E D U C A T I O N

AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

# Course and Offering Registration Form

American Speech-Language-Hearing Association Continuing Education Registry

Instructions: Respond to each of the questions below and attach required information.

Course and Offering Registration Form and required attachments must be received before the:

- 15-day deadline if group or blended, or
- 30-day deadline if cooperative offering, individual learning experience (i.e., self-study) and/or any course requiring a pilot study.

Detailed instructions and additional forms needed for registering individual learning experiences (i.e., self-study courses) and/or courses requiring pilot study are available at <a href="http://asha.org/ce/for-providers/admin/Forms.htm">http://asha.org/ce/for-providers/admin/Forms.htm</a>.

I. Course Information and Description
Provider Code: AAYJ
Name of ASHA Approved CE Provider: Unitron
Course Number: 1342
Course Title: JDVAC 2012 Embracing Innovation: Thinking Outside the Booth
Course Description:
Welcome to Nashville and the fifth annual Joint Defense Veterans Audiology Conference. Since the conference's inception, our planner have endeavored to create an experience that will better equip us t provide the best preventive, diagnostic and rehabilitative care possible, and also to remind us of who it is that we serve. This year we are proud to continue that tradition.
During this year's conference we take the spirit of cooperation and collaboration that is the cornerstone of the JDVAC, and we build upon it by examining how we can engage in specialized work with other medical professionals and fulfill our roles as members of interdisciplinary healthcare teams. We are excited about this year's agenda and we are excited to have you in attendance.
Subject Code: 5030 Content Code: 2 Instructional Level: P
Will you offer this course more than once? $\square$ Yes $\square$ No
Type of Learning Experience (check one):
☐ Group (i.e., live) ☐ Individual (i.e., self-study) ☐ Blended
If Individual Experience (i.e., self-study), check one and provide requested information:
First-time registering with peer reviewers (complete and attach the Product Information Form and Peer Review Forms)

First-time registering Editorial Review Board conducted peer review (submit a list of reviewers and the date the content was accepted by the board)
Recorded version of a live course (live to self): Provide live course's number:
Re-registration of course: Provide previous course's number:
List course offerings on Course Search?  Yes No
(Optional) Registration (contact name and phone number or web address, etc.):
II. Course CEUs
CEU amount: 1 9 _ 5 (e.g. 60 minutes = 0.10 CEU, 90 minutes = 0.15 CEU, etc.)
How did you determine the CEU amount? (check all that apply and provide requested information)
✓ Time-ordered agenda/seat time (attach agenda)
Run time of recording (attach agenda)
Pilot study (complete and attach Pilot Study Form)
☐ Established word count, insert formula:
Previously established, provide the course number:
Is the course designed so that participants can achieve all the course's (or session's) learning outcomes without full attendance (that is, is partial credit an option)?
☐ No (continue to promotional materials section)
Yes (respond to the following)
How will course participants who do not attend the entire course demonstrate achievement of the course learning outcomes? (check one):
The course has multiple sessions and each session has discrete learning outcomes that are assessed at the end of each session.
☐ The course is a series of sessions. Participants must attend a minimum of sessions.
☐ A passing score on an exam is the satisfactory completion requirement.
☐ Participant will successfully demonstrate a skill as the satisfactory completion requirement.
☐ The course has group and individual learning components. Participants can opt out of the individual learning portion of the course and earn credit for the group learning only.
Other (please describe):

# III. Disclosures and Promotional Materials Prior to the course, did you disclose that the course content was focused on a specific product or service? (Response required) ☐ Yes ☑ Not applicable Prior to the beginning of the course, will you disclose financial and in-kind support given by other organizations used to pay for all or part of the costs of the CE course? (Response required) ☐ Yes ☐ Not applicable Yes, relevant financial (or the lack thereof) and nonfinancial (or the lack thereof) disclosure is made in promotional materials for all instructional personnel. (Response required) Yes, disclosure will be made at the start of the course for all instructional personnel. If this course is categorized as *Individual* (e.g., self-studies), disclosure will immediately precede the course content through audio or print delivery, dependent on format. (Response required) Promotional materials. (attach course advertisement(s) which must include: (1) the ASHA CE Approved Provider Brand Block and CEU sentence; (2) instructional personnel disclosure; (3) (if applicable) disclosure that the course is focused on a specific product or service and there will be no or limited information about similar products or services; and (4) if applicable, disclosure of the names of organizations contributing financial and in-kind support.) Sample disclosure statements available at http://www.asha.org/CE/for-providers/admin/Sample-Disclosure-Statements/ (Response required) IV. Course Design

Needs Assessment Process (check all th	at apply):					
✓ Interviewed key individuals	Conducted focus group(s)					
☑ Surveyed sample population	Other (please describe):					
Learning Outcomes:						
Attach course's learning outcomes						
Assessment of Learning Process (check	all that apply):					
☐ Performance demonstrations	☐ Completion of a project					
☐ Written report	☐ Written examination					
☐ Oral report	☐ Oral examination					
✓ Self-assessment	✓ Question and answer session					
Other (please describe):						

Instructional Methodology (check all that	apply):					
✓ Lecture	✓ Small group activity					
☐ Video or audio presentation	✓ Panel discussion					
✓ Demonstration of procedures	☐ Observation of patients					
Case study	☑ Simulations					
Other (please describe):	***************************************					
V. Planning and Instructional Personne	·l					
Yes, we have a process for identifying a CEB Requirement 7.	and selecting instructional personnel that meets ASHA					
• •	ciples of Evidence-Based Continuing Education to development; please indicate the resources provided					
Directed the planner and/or presenter of Evidence-Based CE Tutorial on ASHA'						
Gave the planner and/or presenter of the Course Content [PDF] found on ASHA	e course the Guidance on Infusing Evidence into CE 's website.					
Other (please describe)						
VI. Satisfactory Completion and Course	e Evaluation					
How will you determine whether participa requirements and are eligible to earn ASH.	nts meet the course's satisfactory completion A CEUs? (check all that apply):					
Attendance	f learning outcomes					
Course Evaluation:						
Yes, we have a process for evaluating the improvements that meets ASHA CEB F	is course and using the evaluation results to make Requirement 12.					

# VII. Course Offerings

If there are more than twelve planned offerings, please attach the Additional Offerings form.

Start Date	End Date	City, State, Country (if applicable)	Is this a cooperative offering?  See fee schedule
2/25/2013	2/27/2013	Nashville, TN	✓ yes
			yes
			yes
			□ yes
			yes
			yes
			□yes
	·		□yes
			yes
			☐ yes
			☐ yes
			□yes
Address of coop		ation: 10701 East Blvd, 541-126 ganization: Chris Galizio	6(W), Cleveland, OH 44106
Phone number f	or contact: 216-	791-3800 X 4014	
E-mail address f	for contact: Chr	is.Galizio@va.gov	
Is the other orga	nization an ASI	HA Approved CE Provider?	☐ Yes ☑ No
If no, the non-re	fundable coope	rative offering fee must be sub	omitted (See Page 1).
VIII. Attestatio	ons		
Please read and	check each box	indicating that you agree to:	
	or this course an	planning, implementation, and all its subsequent offerings	nd evaluation and records of for 2 years after the end date of the
	Course Registrat vithin 15 days o	ion Confirmation Letter and n	notify the CE Registry of any

ASHA CE Administrator's Name  Date:	Original signature										
Jeanne Bredenkamp	Jeanne a Breder Kamp										
I understand that if the Course and Offering Reg cooperative offering fees are received after the 1 appeal letter to the CEB.											
Respond only if your organization has a CE Cor  Ensure that he/she participated in the plannin Offering Registration information.	nsultant:  ng of the course and has reviewed the Course and										
Submit Course and Offering Registration Forms, required attachments and cooperative offering fees (if applicable) by the 15-day or 30-day deadline.											
Check the CE Course Roster and notify the CE Registry of any corrections within 45 days.  Retain the participants' names and ASHA CEUs earned for a minimum of 2 years from the completion date of the course offering.											

Either mail or fax the completed Course and Offering Registration Form, the required attachments, and the cooperative offering fees (if applicable) to:

Mailing address for registrations without fees:
Continuing Education, ASHA, 2200 Research Blvd. #340, Rockville, MD 20850

Mailing address for registrations including cooperative payment(s): Continuing Education, ASHA, P.O. Box 1160 #340, Rockville, MD 20849

Fax number (do not fax if credit card information included): 301-296-8574

Time-ordered agen	ıda -	JDVA		racing Innovation: Thinking outside the Booth
	tart me	End time	Number of minutes	Description including content, speaker, and activities
			**Minutes	
			in bold	
Monday, February	25, 2	2013	type are	
			calculated	
			toward	
8	00	830	30	Welcome and Introduction
8	30	930	60	Practicing in the White Space, Lieutenant General Patricia Horoho
9	30	1000	30	Break
10	000	1200	120	I'm No Hero, Charlie Plumb, CAPT (ret.), USN
12	200	1300	60	Lunch
Monday, February				
Army				
- 1 - 호텔 의 호텔 (호텔 설립) - <b>4 5</b>	300	1330	30	Welcome and Introduction
13	200	1550	30	yvelcome and introduction
13	330	1600	180	Our Culture of Responsibility LTC Kristen Casto, LTC Marjorie Grantham, MAJ Dan Ohama, COL Vickie Tuten
			240 min	Total possible minutes for Army breakout day
Monday, February	25, 2	2013		,
	300	1330	30	AF Audiology/SLP Consultant Address, LtCol Beth
	330			Harrison
	350 350	1350 1410	20 20	Break BSC Manning & Force Structure, Maj David Eisenach
	410	1430	20	AFPC; Career Development, Maj Alicia Nelson
	430	1450	20	Hearing Center of Excellence, Maj Jeff Wisneski
14	450	1520	30	DOEHRS- HC Update, Capt Elizabeth McKenna
15	520	1540	20	Research and Audiologic Support in a Deployed
15	540	1600	20	Environment, Maj Brandon Tourtillott Retro Review Comparing KC-10 and C-5 Crew Hearing
			150 min	Loss, Maj Courtney Harper Total possible minutes for Air Force breakout day
Monday, February	25. 2	2013		,
VA	, _			
	300 330	1330 1415	30 <b>45</b>	Welcome and Introduction Meeting the Challenges of VA Audiology Care in the 21st Century, Lucille Beck, PhD
1/	415	1445	30	Scott Forbes, AuD
	445	1500	15	Break
	500	1600	60	Operation SAVE, Sarah Levis, LCSW
	300	1630	30	FAC update, Rachel McCardle, PhD
16	330	1700	30	C&P Q&A, Kyle Dennis, PhD
			195 min	Total possible minutes for VA breakout day
Monday, February : Navy	25, 2	2013		
			60 min	Total possible minutes for Navy breakout day
Tuesday, February 26, 2013				
80	0	830	30	Welcome, Pledge, National Anthem, LTC Amy Blank
83		930	<b>60</b>	Reporting and Documentation in an Electronic Medical Record, Virginia Ramachandran, AuD, PhD

	930	1000	30	Break
	1000	1200	120	What Referring Physicians Look For in Audiologic Reports, Clark Walker, MD
	1200	1300	60	lunch
	1300	1400	60	Update on the VA Cochlear Implant Program, Maureen
Concurrent	4000	40.0		Wargo, AuD, Nancy Cambron, AuD
		1345	45	Hearing Conservation Basics, LtCol Majorie Grantham
	1345	1430	45	Tri-Service Unique Program Challenges, Lt Amy McArthur
	1300	1325	25	Hearing Aid Considerations for Tinnitus Patients, Steve Benton, AuD
	1325	1350	25	Effects of Patient and Stimulus Factors on Speech in
	1350	1415	25	Noise Perception, Tina Penman, AuD Utility of Standard DPOAEs in the Evaluation of the
				Normal-Hearing Tinnitus Patients, Steve Benton, AuD
	1400	1500	60	Medical and Surgical Considerations in Cochlear
Concurrent	1420	á.coo	20	Implantation, Clifford Hume, MD
	1430 1415		30 45	DOEHRS-HC Update, Capt Elizabeth McKenna
	1410	1500	45	The Video Head Impulse Test, Owen Murnane, PhD
	1500	1530	30	break
	1530	1700	90	Bimodal Hearing vs. Bilateral Cochlear Implantation: Is
Conquerent	1520	4550	20	there a Functional Difference?, Rene Gifford, PhD
Concurrent	1550	1550 1610	20 20	Team Approach to Follow Up Care, Laura Cote, AuD
	1000	1010	20	St. Cloud VAMC Mobile Audiology Unit Part 2, Alan Sias, AuD
	1610	1630	20	Fleet Hearing Loss Prevention Project: Hearing Protection
	4000	4050		Field Performance, CDR Antony Joseph
Concurrent	1630	1650	20	Tactical Communications and Protective Systems:  Update on Efforts in Research and Acquisition, LtCol
Ooriodirent				Marjorie Grantham
	1710	1740	30	Auditory Neuropathy Spectrum Disorder: Intervention and Management, Ben Sierra, AuD
			420 min	Total possible minutes for Wednesday 3/21/12
Wednesday Fel	ruary :	27,		
	8	830	15	Welcome, Sarah Draplin, AuD
	830	930	60	Development of a Theraputic to Protect the Inner Ear:
				From Animal Models to Human Trials, Colleen Le Prell, PhD
	930	1000	30	break
	1000	1100	60	DoD Hearing Center of Excellence: Bringing Visibility to
				the Invisible Injury, Mark Packer, MD, Kyle Dennis, PhD
	1100	1200	60 <b>00</b>	lunch  A Multidianininana Approach to Magazzara of the Size
	1200	1330	90	A Multidisciplinary Approach to Management of the Dizzy Patient Pt 1. Faith Akin, PhD, Courtney Hall, PT, PhD,
				Sharon Polensek, MD
	1200	1230	30	Do Patients Diagnosed with ANSD benefit from cochlear
Concurrent	4000			implantation? Ben Sierra, AuD
	1230	1300	30	New Developments in Implantable and Bone Conduction Technology
	1300	1330	30	Extended High Frequency Audiometry, Danny Secor
	1330	1400	30	break
	1400	1600	120	A Multidisciplinary Approach to Management of the Dizzy
Concurrent				Patient Pt 2. Faith Akin, PhD, Courtney Hall, PT, PhD,
Concurrent	1400	1430	30	Sharon Polensek MD Preserving Hearing in the Military with an Educational
		-	-	Training Kit, Lynne Marshall, PhD
	1430	1500	30	Generating Prevalence Data by Use of Noise Notch
				Calculations in Normal and Hearing Impaired Military
				Personnel, CDR Antony Joseph, AuD, PhD

Concurrent	1600	1630	30	Landing on the Roof- Second Approach, Kurt Yankaskas					
Concurrent	1630	1700	30	Determining OSHA Reportable Hearing Loss, Capt Erin Artz					
			430 min	Total possible minutes for Wednesday 3/21/12					
Concurrent Poster Sessions Tuesday 2/26/13	1600	17:30	90	Total minutes available for viewing nosters					
			90 min	Total minutes available for viewing posters					

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Please complete and return this form to Jeanne Bredenkamp at Unitron via fax 1-800-507-0472 or email jeanne.bredenkamp@unitron.com

# Form must be turned in to receive credit for this course. Thank you!

Attendance and CEU Request Form

Date:	City:	·		
Course To	opic:			
Instructor	·			<u>.</u>
Name:				
	PLEASE PRINT	CLEARLY		
Address:				
, taa, 655,	(Street) PLEA	ASE PRINT CLEARLY		
	(City, State and ZIP) PLEAS	SE PRINT CLEARLY		
Clinic or B	usiness you represent:			
	PLEASE PRINT C	CLEARLY	<del></del>	
Email:				
Unitron A	Account Number			
Please placinformatio	ce a check next to which CEUson. We cannot submit withou	s you are request ut your informatio	ing and provide the	appropriate
> ASI	на	#		
No Tha	ank You! I don't need CEUs			





# **ASHA CEU Participant Form**

American Speech-Language-Hearing Association Continuing Education Registry

Prov	ider C	ode					Co	ourse	Numl	ber						Completion Date
			Sub	mit tl	is fo AS	rm to HA C	the l EUs	Provi throu	der at	t the	end o	of the SE R	cour egistr	se if y y (an	ou w nual	ish to earn and maintain fee required).
speech- Lic (St Cer (St Clin (Su Enr pro	Submit this form to the Provider at the end of the cour ASHA CEUs through the ASHA CE Regists.  If not an ASHA member or CCC holder, you must be licensed or credentialed to practice speech-language pathology (SLP) or audiology or preparing to practice to earn ASHA CEUs.  Licensed: (State and License #)  Certified: (State/Organization and #)  Clinical Fellow: (Supervisor name and her/his ASHA account number)  Enrolled in a graduate program in SLP or audiology: (University name and expected graduation date)  Please enter your last name (as it appears on your ASHA id card) below. Enter the letters spaces provided in the 1st row and fill the entire box that corresponds to the letter in each Last Name (Only)										Nam Addr City Zip Dayt E-ma	nual e ess ime Ph	State Country none (			
B B C C C C C C C C C C C C C C C C C C	-	B  D  E  F  G  H  I	B C C C E E F G G K	B C C F G H	B C C F G K K	B C C H L J	B 0	B O D E F O H I J	В О В Б Б О Н П	B C D E F G K	B O D E E F O T T K	В О О Б К К К К К К К К К К К К К К К К К	B O D W F G F T T T T T T T T T T T T T T T T T	B C C D E E F G G H K	B C D E F G H 1	2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3
M M M M M M M M M M M M M M M M M M M	M	v w x	N	M Z O O P O O V W X X Y Z	M N N N N N N N N N N N N N N N N N N N	N	Д М О Р О R R S V V V X X	L M N O P O R S V W X X Y	M Z O O P O O R R S V W X X Y	L   M   N   O   P   O   R   S   T   U   V   X   Y   Z	L M N O P O O R R S V V X X	L M N N N N N N N N N N N N N N N N N N	M	N   N   N   N   N   N   N   N   N   N	L M N N O P O R S V W X Y N	Provider Use Only Complete only for those participants receiving less than the maximum number of ASHA CEUs (i.e., partial credit). Please fill in leading zeros followed by the number of ASHA CEUs. For example, to indicate a participant earned .55 ASHA CEU's (that is, 5 1/2 hours) write 0055.  1

62046



# Participant Evaluation Form/Learner Assessment

**Course Title:** Joint Defense/Veterans Audiology Conference 2013 Solving the Puzzle: Joining Audiology and Interdisciplinary Healthcare Teams

Course Date:	Monday March 19,	2012 – Wednesday	y March 21,	2012
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**Instructions:** Using the 5-point rating scale provided, rate the following statements:

# (5) STRONGLY AGREE, (4) AGREE, (3) NEUTRAL,(2) DISAGREE, (1) STRONGLY DISAGREE

The activity provided me with useful information	1	2	3	4	5	
The presentation of the material was clear.	1	2	3	4	5	
The speakers were knowledgeable about the subject matter.	1	2	3	4	5	
The training objectives were clearly specified and achieved during the activity.	1	2	3	4	5	
I have acquired knowledge and skill which will improve my job performance and quality of care.	1	2	3	4	5	
The facilities for this activity were conducive to learning.	1	2	3	4	5	
My overall evaluation of this course is positive.	1	2	3	4	5	
Please list three things you learned during this conference that will impaudiology services at your facility: (1)	pact you	ır ab	ility	to pr	ovide	
(2)						-
(3)			·			

Comments:

# Joint Defense/Veterans Audiology Conference February 25-27 2013 Program Evaluation Form

TITLE: Solving the Puzzle: Joining Audiology and Interdisciplinary Healthcare Teams

Read each statement carefully and select your level of agreement with the following statements: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1).

The content and level of difficulty were described accurately.	Strongly Agree	4	3	2	Strongly Disagree
This activity had clearly stated learning	_	4	J	_	Strongly Disagree
objectives and outcomes.	Strongly Agree 5	4	3	2	1
The information source(s) demonstrated a	Strongly Agree	•	-		Strongly Disagree
thorough knowledge of the topic.	5	4	3	2	1
The information source(s) used time efficiently	Strongly Agree				Strongly Disagree
and effectively.	5	4	3	2	1
The organization of this activity facilitated	Strongly Agree				Strongly Disagree
learning.	5	4	3	2	1
Audiovisuals and support materials were	Strongly Agree				Strongly Disagree
appropriately designed and used.	5	4	3	2	1
Physical accommodations (room, lighting, etc.)	Strongly Agree				Strongly Disagree
facilitated learning.	5	4	3	2	1
This activity was one of the best this program	Strongly Agree				Strongly Disagree
has offered.	5	4	3	2	1
This activity increased my knowledge and/or	Strongly Agree				Strongly Disagree
skill in the topic.	5	4	3	2	1
This activity increased my interest in	Strongly Agree		2	2	Strongly Disagree
the topic.	5	4	3	2	1
This activity provided me new and/or useful	Strongly Agree	4	2	2	Strongly Disagree  1
information.	5	4	3	2	
I will apply the knowledge and/or skill gained	Strongly Agree 5	4	3	2	Strongly Disagree 1
from this activity to my work.	Strongly Agree	4	3	-	Strongly Disagree
This activity was too long for the content	5 5 5	4	3	2	1
presented.	Strongly Agree				Strongly Disagree
This activity is a related topic to my current profession.	5	4	3	2	1
This activity will contribute to my professional	Strongly Agree				Strongly Disagree
•	5	4	3	2	1
growth.					
Additional Comments					



# Participant Notification

# **ACKNOWLEDGEMENT OF COMMERCIAL SUPPORT**

This program was funded in its entirety by The Association of VA Audiologists (AVAA) and the Military Audiology Association (MAA)

# **FACULTY DISCLOSURE**

Presenters for Unitron events have provided the following information:

G=Grant/Research Support C=Consultant/Scientific Advisor E=Employee

N=No Financial/Non-financial Relationship to disclose X=None provided at time of printing

M=Major Stockholder

Last Name	First Name	Disclosure of Relationship	COI Resolution
Akin	Faith	G= Department of Veterans Affairs,	Peer reviewed
		Rehabilitation, Research &	
		Development	
Armbruster	R. Scott	M= shareholder, self managed	Peer reviewed
Artz	Erin	N	N/A
Benton	Steven L.	N	N/A
Cambron	Nancy	N	N/A
Casto	Kristen	N	N/A
Chandler	David	N	N/A
Cote	Laura	N	N/A
Crawford	Joyce	N	N/A
Frye	George J	M=Frye Electronics, President	N/A
Gifford	Rene'	C=Cochlear Americas, MED EL	Peer Reviewed
Grantham	Marjorie	N	N/A
Hall	Courtney	N	N/A
Harper	Courtney	N	N/A
Hume	Clifford	N	N/A
Johnson	Earl	N	N/A
Johnston	Paula	N	N/A
Le Prell	Colleen	G= Grant Support from NIH-NIDCO,	Peer Reviewed
		Sound Pharmaceuticals	
		O= Royalties	
		C=Sciientific Advisor (unpaid) for	
		Hearing Health Science Inc.	
McArthur	Amy E.	N	N/A
Merkley	John A.	N	N/A
Murnane	Owen	N	N/A
Ohama	Dan	N	N/A
Ostolaza	Giselle	N	N/A
Packer, M.D.	Mark	N	N/A

Paul	Kelly	N	N/A
Penman	Tina	E= NCRAR	Peer reviewed
Pfannenstiel	Travis	N	N/A
Polensek	Sharon	N	N/A
Ramachandran	Virginia	N	N/A
Secor	Danny	N	N/A
Sias,	Alan	E= St. Cloud VA HCS	Peer reviewed
Sierra-Irizarry	Benigno	N	N/A
Tourtillott	Brandon	N	N/A
Tuten	Vickie	N	N/A
Wango	Maureen	N	N/A
Williams	Daniel	N	N/A
Wisneski	Jeffrey	N	N/A



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This program is offered for 1.95 ASHA CEUs (Intermediated level: Professional Area)

49.

Army Led Novy Led Air Force Led VA Led Seasons Seasons Seasons Seasons	Color Key  Student Joint Concurrent Concurrent Experience Sessions Sessions Sessions	Conquirrent Technical Break/Poster Sessions Review Sessions
Monday, February 25th 2013  Joint Sessions Announcements	Tuesday, February 28th 2013  Joint Sessions  Announcements	Wednesday, February 27th 2013  Joint Sessions  Announcements 86
Lieutenant General Patricia Horoho Practicing in the White Space	Dr. Virginia Ramachandran Documentation	Dr. Colleen Le Preil Hearing Conservation
0930-1000 Break Charlie Plumb, CAPT (ret.), USN "I'm no Here"	0930-1000 Break/Grand Opening of Poster Session/Exhibit Hall Open Dr. Clark Walker What Referring Physicians Look For In Audiologic Reports	0830-1000 Break and Exhibit Hall Open  Dr. Mark Packer & Dr. David W. Chandler Hearing Center of Excellence: Developments in Information Management
50 100		1100-1200 Lunch and Exhibit Hall Open
00 1200-1330 Lunch and Exhibit Hall Open	1200-1300 Lunch, Poster Session, and Exhibit Hall Open	Vestibular Session  Residency Approach Management Dr. F. Alde Dr. S. Police Dr. Dr. S. Police Dr.
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12/30/2012 5:04:00 PM

# Monday, February 25

8:30am-9:30am

Lieutenant General Patricia Horoho Practicing in the White Space

#### **Abstract**

Soldier medicine today, more than ever, requires a total team effort for success. This team effort requires collaboration and integration between many agencies, from the point of injury on the battlefield to rehabilitation and possible life-long services through the Veteran's Administration. On average, only 100 minutes of primary healthcare is provided face-to-face. Over 99% of the rest of a patient's life happens between these visits. What is happening between these visits? How do we positively impact the "99%"? Our systems needs to transition from healthcare delivery to more of a focus on health – the other "99%". This paradigm shift requires healthcare systems to use technology and resources in relevant and engaging ways to positively impact health. Patient health needs to be connected, collaborative and patient-centered.

#### **Learner Outcomes**

Participants will be able to:

Describe at least two examples of collaboration and integration team efforts that span the uniformed services through the Veteran's Affairs?

Define the "white space".

What are the three main components of the "99%"?

Describe at least two examples of how healthcare systems can empower patients to engage and take control of their lives and their health.

## **Biography**

Lieutenant General Patricia D. Horoho assumed command of the U.S. Army Medical Command on 05

December 2011 and was sworn in as the 43rd Army Surgeon General on 07 December 2011. Her previous positions include Deputy Surgeon General, Office of The Surgeon General, Falls Church, VA, from 2010 to 2011; 23rd Chief of the US Army Nurse Corps, from 2008-2011; Commander, Western Regional Medical Command, Fort Lewis, Washington, from 2008 to 2010; Commander, Madigan Army Medical Center, Tacoma, Washington, from 2008 to 2009; Commander, Walter Reed Health Care System, Washington D.C., from 2007 to 2008; and Commander, DeWitt Health Care Network, Fort Belvoir, Virginia, from 2004 to 2006.

Lieutenant General Horoho earned her Bachelor of Science in Nursing degree from the University of North Carolina at Chapel Hill in 1982. She received her Master of Science degree as a Clinical Trauma Nurse Specialist from the University of Pittsburgh. She is a resident graduate of the Army's Command and General Staff College and the Industrial College of the Armed Forces, where she earned a second Master of Science degree in National Resource Strategy. Other military assignments include Staff Nurse on a multi-service specialty ward, Staff and Head Nurse of a Level III emergency department, Evans Army Community Hospital,

Fort Carson, Colorado; Nurse Counselor, 1st Recruiting Brigade (Northeast) with duty at Harrisburg and Pittsburgh Recruiting Battalions; Head Nurse of a 22-bed emergency department, Womack Army Medical Center, Fort Bragg, North Carolina; Chief Nurse and Hospital Commander of a 500-bed field hospital, 249th General Hospital, Fort Gordon, Georgia; Assistant Branch Chief, Army Nurse Corps Branch, United States Total Army Personnel Command, Alexandria, Virginia; Assistant Deputy for Healthcare Management Policy in the Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs), Pentagon, Washington, D.C.; Deputy Commander for Nursing and Commander of the DeWitt Health Care Network, Fort Belvoir, Virginia; and Deputy Commander for Nursing, Walter Reed Army Medical Center and North Atlantic Regional Medical Command, Washington, D.C. In 2011, Lieutenant General Horoho deployed with I Corps, as the Special Assistant to the Commander, International Security Assistance Force Joint Command, Kabul Afghanistan.

Recognitions include being selected in 1993 by "The Great 100" as one of the top one hundred nurses in the State of North Carolina. In the same year, she was also selected as Fort Bragg's Supervisor of the Year. She deployed to Haiti with the Army's first Health Facility Assessment Team. In 1998, she co-authored a chapter on training field hospitals that was published by the U.S. Army Reserve Command Surgeon. Lieutenant General Horoho was honored on December 3, 2001, by Time Life Publications for her actions at the Pentagon on September 11, 2001. On September 14, 2002, she was among 15 nurses selected by the American Red Cross and Nursing Spectrum to receive national recognition as a "Nurse Hero." In 2007, she was honored as a University of Pittsburgh Legacy Laureate. In April 2009, she was selected as the USO's "Woman of the Year," and in May 2009, she became an affiliate faculty with Pacific Lutheran University School of Nursing, Tacoma, Washington. In May 2010, the Uniformed Services University of Health Sciences appointed her as Distinguished Professor in the Graduate School of Nursing. In 2011, University of North Carolina School of Nursing selected her as the Alumna of the Year. On February 24, 2012, she was recognized by the University of Pittsburgh as a Distinguished Alumna Fellow. Recently, Lieutenant General Horoho was awarded the Doctor of Public Service in Nursing Honoris Causa from University of Pittsburgh. She is also a member of the Uniformed Services University Board of Regents.

Lieutenant General Horoho's awards and decorations include the Distinguished Service Medal, Legion of Merit (2 OLC), the Bronze Star Medal, Meritorious Service Medal (6 OLC), Army Commendation Medal (3 OLC), Army Achievement Medal (1 OLC), Armed Forces Expeditionary Medal, Afghanistan Campaign Medal and various service and unit awards. She served as the Head Nurse of Womack's Emergency Department when the hospital was awarded the Superior Unit Citation during the Pope AFB Crash in 1994. She is also authorized to wear the DA Staff Badge and is the recipient of the Order of Military Medical Merit Medallion.

# **Army Breakout**

# 1:30pm-4:00pm

LTC Kristen Casto, LTC Marjorie Grantham, MAJ Dan Ohama, COL Vickie Tuten Our Culture of Accountability

#### **Abstract**

The Army Hearing Program has evolved from a program with an industrial focus to one that provides hearing readiness, hearing conservation, operational, and clinical hearing services to Service Members across the continuum from home station to a theatre of operations. This paradigm shift is based on the fact that hearing loss should no longer be an acceptable by-product of military service. This requires a more structured approach to conducting preventive medicine activities, as well as tracking those activities for accountability. Tracking clinical hearing services has been the traditional way of measuring audiologist and hearing technician productivity at medical treatment facilities. However, preventive medicine activities are those that have the greatest impact on reducing noise-induced hearing loss in our service members. Tracking preventive medicine metrics at the installation level, with accountability to the Army Hearing Program office, will be outlined in the upcoming revision of DA Pam 40-501. This presentation, by a panel of audiologists, will provide a detailed layout of the new requirements for tracking productivity. Templates and both strategic and installation-level metrics available to program managers and commanders will be presented. This presentation will also provide program managers the "where, and how" to put these processes in place at their installations.

#### **Learning Objectives**

Attendees will be familiar with the templates for tracking metrics at the local level.

Attendees will know how to access the website where both strategic and installation periodic metrics may be accessed and the relationship to metrics tracked by the Audiology Balanced Score Card.

Attendees will understand how to use the templates and metrics to provide briefings to their commanders.

# **Biography**

Lieutenant Colonel Kristen Casto is the Audiology staff officer at the Proponency Office for Preventive Medicine, Office of the Surgeon General-National Capital Region. LTC Casto earned a doctorate in Audiology (Au.D.) from Central Michigan University and a Ph.D. in Human Factors Engineering from Virginia Tech. Her clinical and research interests include the communication challenges of the hearing impaired Soldier, auditory fitness-forduty assessment, and Army aviation communications. LTC Casto is certified by the American Speech-Language-Hearing Association (ASHA) and is a Fellow of the American Academy of Audiology (AAA). She is also a member of the Human Factors and Ergonomics Society and the Military Audiology Association.

Colonel Vickie Tuten is the Program Director for the Otolaryngology Technician Program at the Medical Enlisted Training Campus, San Antonio, TX. She is also the current Audiology Consultant to The Army Surgeon General, Associate Director of Prevention for the DoD Hearing Center of Excellence, and Chair, DoD Hearing Conservation Working Group. COL Tuten earned a doctorate in Audiology (Au.D.) from Central Michigan University. She has previously served as an Officer for the Military Audiology Association, the National Hearing Conservation Association, and served as a representative for the Military Audiology Association on the Council of Accreditation of Occupational Hearing Conservationists (CAOHC). She is also of member of the National Advisory Board for the National Center for Rehabilitation and Auditory Research (NCRAR).

Lieutenant Colonel (P) Marjorie A.M. Grantham, Ph.D., currently serves as he Army Hearing Program Manager, U.S. Army Public Health Command. Her past assignments include the Army Research Laboratory, Science and Technology Acquisition Corps Advisor for the Afghanistan Theater of Operations, and Hearing Conservation Program Manager, Forts Lewis, Stewart, and Wuerzburg, Germany. LTC(P) Grantham's current focus areas are: establishing evaluation criteria for non-linear hearing protection devices and Tactical Communication and Protection Systems (TCAPS), working with the DoD to establish better metrics for hearing loss prevention program analysis and improvement, supporting upgrades to DOEHRS-HC, establishing a national standard for impulse noise measurement, and including localization and speech intelligibility measures in fitness for duty evaluations.

MAJ Dan Ohama is currently serving at Fort Lewis, WA as the Army Hearing Program Manager. He has held previous assignments in Hawaii, Korea, and spent one year in Iraq serving as a deployed audiologist. MAJ Ohama has worked tirelessly to improve communications between Army Hearing Program Managers and field commanders and leaders.

#### Air Force Breakout

# 2:30pm-2:50pm

Hearing Center of Excellence: Developing DOD Standardization for Ordering and Procurement of Hearing Devices

Maj. Jeff Wisneski

#### Abstract:

In October 2009, the Air Force Medical Service (AFMS) was officially designated as the DOD lead component for the HCE. The HCE was legislated by Congress in the FY 2009 NDAA (Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, P.L., No. 110-417, Section 721). Under the NDAA, the DOD Hearing Center of Excellence (HCE) was directed (to the maximum extent practicable) to partner with the VA, institutions of higher education, and other appropriate public and private entities. The HCE leads a collaborative effort to address prevention, diagnosis, mitigation, treatment, and rehabilitation of hearing loss and auditory system injury, including auditory-vestibular dysfunction related to traumatic brain injury, for the DOD and the VA. The Air Force was designated as the Lead Component with the goal of ensuring optimal DoD and VA collaboration. An Interim Director was named and is guiding Center stand-up with support from Wilford Hall Medical Center/59th Medical Wing and AFMOA/SGB. The HCE's primary responsibilities include:

- Developing a data registry to track hearing loss and auditory system injuries across the Armed Forces and share the data in the registry with the VA
- · Encouraging and facilitating the conduct of research
- Developing best practices and clinical education
- Ensuring coordination of rehabilitation benefits and services offered by the VA to former service members.

The DoD began utilizing the Department of Veterans Affairs, Denver Acquisitions Logistics Center (DALC), Remote Order Entry System (ROES), in 1998 at five MTFs. This successful partnership resulted in significant improvements to the ROES, which now provides the DOD with secure access and real time ordering capabilities at 25 MTFs. Currently, 80 MTFs provide hearing health services and all would benefit from using ROES.

# Learner outcomes

This talk will discuss the implementation of a standardized ordering and procurement process for hearing aids, assistive auditory devices, cochlear implants, and related batteries and accessories across the DOD Enterprise, beginning with patients seen in DoD Medical Treatment Facilities (MTFs).

Policies have been developed mandating utilization of the ROES for procuring all hearing aids, assistive auditory devices, cochlear implants, and related batteries and accessories purchased for our beneficiaries

who are treated by our MTF providers. We will examine extending this policy to patients currently seen in the purchased care network.

An in-depth analysis by the Army, Air Force and Navy, finds the ROES to be an effective and efficient system. The ROES allows the DOD to obtain hearing aids, assistive auditory devices, cochlear implants, batteries, and accessories at significantly reduced costs, and dramatically reduces the waiting time for our active duty service members. In addition, the ROES is a centralized repository of hearing healthcare information that will greatly benefit our service members by providing a seamless transition from active duty to the veteran's ranks.

# **Biography**

Major Jeffrey L. Wisneski is currently the Chief, Force Development, Assignment Support Division, Air Force Personnel Center. He leads a section that is charged with coordinating Squadron Officer School billets AF wide, developing and troubleshooting the Airmen Development Plan, and providing Development Team tool support for 117 annual meetings for over 1,000 senior leaders.

Major Wisneski was born in Fairview Park, Ohio on 19 December 1974. He graduated from Ohio University with a BA in Hearing and Speech Sciences in 1997. In 1999, he graduated from the University of Akron with a MA in Audiology. He spent one year in a private audiology practice in Youngstown, Ohio before receiving direct commission into the USAF's Biomedical Science Corps (BSC) as a 1Lt. in 2000. In 2005, He graduated from The University of Florida with his clinical doctorate (Au.D).

## 2:50-3:20pm

DOEHRS- Hearing Conservation Data Repository Update Capt. Elizabeth McKenna

#### Abstract

Update intended for Air Force audiologists, to include discussion of current projects within USAF School of Aerospace Medicine, potential upcoming changes to the current AFOSH 48-20 document, status of DOEHRS-HC/DR applications and funding priorities.

#### Learning outcomes

Understand the current status of the hearing conservation program software changes; understand the salient changes to the Air Force hearing conservation regulation in-draft.

# Biography

Capt Elizabeth McKenna is a USAF Audiologist, currently serving as the Hearing Conservation Program Manager and subject matter expert at the Air Force School of Aerospace Medicine in the Epidemiology Consult Services of the Public Health and Preventive Medicine Department. Previous assignments include Flight Commander of Audiology at Sheppard AFB, Texas, and Clinical Audiologist at Lackland AFB, Texas. She received her Doctor of Audiology from the Northeast Ohio Au.D. Consortium after completing her clinical

training at the Cleveland Clinic Foundation in 2007, and her Bachelors in Hearing, Speech and Language Sciences from Ohio University in 2003.

# 3:20pm-3:40pm

Brandon M. Tourtillott, PhD Maj, USAF, BSC

Research and Audiologic Support in a Deployed Environment

#### **Abstract**

This presentation will discuss some challenges and opportunities of conducting research in theater while also discussing the need and role of Audiologic Support in-Theater.

#### **Learner Outcomes**

What are some of the research gaps needed to be explored for fitness for duty determination?

What are some critical roles Audiologists can provide in Theater?

What are the most common types and causes of hearing loss in the deployed setting?

## Biography

Maj Brandon Tourtillott is currently serving as the Uniform Services University of the Health Sciences (USUHS) Air Force Medical Student Squadron Section Commander/Assistant Commandant in Bethesda, MD. He completed a Master of Science degree in Audiology at Missouri State University in 2002 and accepted a direct commission into the Biomedical Sciences Corps (BSC) in United States Air Force. Maj Tourtillott completed an Air Force Institute of Technology (AFIT) sponsored Ph.D. in Audiology from the University of Kansas in 2009. His research interests include auditory and vestibular electro-physiologic measures and their relationship to cognitive and vestibular function. Maj Tourtillott recently returned from a deployment to Afghanistan in support of OEF where he served as a Senior Scientist on the Joint Combat Casualty Research Team and provided Audiologic support at Craig Joint Theater Hospital at Bagram Airfield, Afghanistan.

## 3:40pm-4:00pm

Courtney Harper, Capt, USAF, BSC, AuD

A Retrospective Review Comparing KC-10 and C-5 Crew Hearing Loss

#### **Abstract**

A retrospective review was done comparing KC-10 crew hearing loss and C-5 crew hearing loss to determine if there was a difference in hearing loss between the groups. The KC-10 crew is not required to wear hearing protection except for the boom operator when he/she is in the boom. The KC-10 pilots and flight engineers all wear a headset on one ear; the ear is determined based on their position in the plane. The air craft commander sits on the left side of the plane and therefore leaves his right ear open and the co-pilot sits on the right side of the plane and leaves his left ear open. The flight engineer is seated on the right side of the plane

so his left ear is open. The C-5 crew members all wear bilateral hearing protection devices. We analyzed the data from the past 10 years to determine if there was an asymmetrical shift in hearing seen in the KC-10 crew.

#### Learner outcomes

Students will discuss how KC-10 hearing protection differs from other air frames.

Does the lack of a significant difference in asymmetric hearing loss compared to the C-5 mean that bilateral hearing protection should not be used/encouraged for KC-10 crewmembers?

Is there anywhere on the KC-10 where bilateral hearing protection is or should be required at all times?

# Biography

Capt Courtney Harper graduated with a B.S. in Speech Language Pathology in 2002 from the University of Central Arkansas and with a M.S. in Audiology in 2005 from the University of Arkansas for Médical Sciences. Capt Harper completed her Doctor of Audiology degree in August 2011 through AT Still University Arizona School of Health Sciences. She was commissioned in June 2005, and assigned to Wilford Hall Medical Center (WHMC) Lackland AFB, Texas as a staff audiologist from Jul 2005 to Jul 2009. She distinguished herself as the Chief of the Balance Center, and as an Instructor for the Otology-Resident training program. While working at WHMC she also extended audiological services to Paraguay humanitarian mission, and provided manning assistance to Elmendorf AFB, Alaska.

Capt Harper served as the Chief of Hearing Conservation, Diagnostic Center from August 2009 to November 2012 at David Grant Medical Center, Travis AFB, CA. While at Travis she served as an audiology consultant for the Occupational & Environmental Health Working Group, and a consultant for the BioEthics Steering Committee.

Capt Harper moved to Macdill Air Force Base in November 2012 where she is currently serving as the Chief of Audiology services and providing hearing conservation reviews to regional Air Force bases and National Guard units with a population of over 7,000 members on the hearing conservation program in her area.

# **VA Breakout**

## 1:30pm-2:15pm

Title: Meeting the Challenges of VA Audiology Care in the 21stCentury

Presenter: Lucille Beck, PhD

#### Abstract:

This presentation will include, but will not be limited to, the following topics: (1) current audiology practices for VA audiologists and anticipated changes in policy driving best practices; (2) new VAi2 initiatives that may impact on the clinical care delivery model for VA Audiology; (3) data from hearing aid outcome measure (VAwide) and its impact on best practice with hearing aids; (4) strategic initiatives which may impact on clinical care and audiology services; (5) telehealth initiatives and their impact on delivery of audiological services in the VA; and (6) highlights educational opportunities that are available for VA audiologists.

#### **Learner Outcomes:**

- 1. The participant will be list 2 potential uses of hearing aid outcomes data
- 2. The participant will be to identify at least 2 educational opportunities in the VA for Audiologists
- 3. The participant will be to summarize the transformational initiatives put forth by the Secretary of the VA and describe how Audiology can be a part of the transformation in VA health care.

#### Bio Sketch:

Lucille B. Beck, Ph.D. is Chief Consultant, Rehabilitation Services and Director of the Audiology and Speech Pathology Program in the Office of Patient Care Services, Veterans Health Administration for the Department of Veterans Affairs (VA). She is also Chief of Audiology and Speech Pathology Service (ASPS) at the Washington, DC VA Medical Center. As Chief Consultant for Rehabilitation Services, responsibilities include oversight and direction for Audiology and Speech Pathology Service, Blind Rehabilitation Service, Physical Medicine and Rehabilitation Service and Polytrauma, and Recreation Therapy Service. Dr. Beck received the Presidential Rank Award for Meritorious Executive Service in 2000, and in 2007 received the Presidential Rank Award for Distinguished Executive Service. The Pennsylvania College of Optometry, School of Audiology, conferred upon Dr. Beck the honorary degree, Doctor of Science, in 2008 for her commitment to Americans with hearing loss. Dr. Beck received her Ph.D. from the University of Maryland. She has jointly held faculty appointments at Gallaudet University, George Washington University, and the University of Maryland. She has authored numerous publications, scientific papers, and is a well known presenter on topics ranging from amplification, outcomes, patient satisfaction, professional issues in Audiology and Rehabilitation for the nation's veterans. She is a recognized subject matter expert in hearing technology.

# 3:00pm-4:00pm

Operation S.A.V.E.

Sarah Levis, LCSW

# **Abstract**

Operation S.A.V.E. is a Veteran specific beginner level training program designed to give non-clinical staff and community members a way to remember the steps in the process of identifying a potentially suicidal Veteran, confirming the Veteran's status, reassuring the Veteran that they are being heard and leading the Veteran to help.

# Learner outcomes

- Have a general understanding of the scope of suicide within the United States
- Know how to identify a Veteran that may be at risk for suicide
- Know what to do when you identify a Veteran at risk

# Biography

Sarah Levis, LCSW, is a clinical licensed social worker and currently serves at the Suicide Prevention Coordinator (SPC) and Local Recovery Coordinator (LRC) at the Canandaigua VA Medical Center in Upstate New York. In the SPC role, Ms. Levis has conducted numerous trainings for VA staff, veterans, community

partners and family members of veterans. Ms. Levis has worked in the mental health field for the past 12 years with experience that includes working with Seriously Mentally III veterans and substance abuse disorders. In the role of LRC, Ms. Levis works with staff and veterans in behavioral health and the Medical Center to engage and promote patient centered care. Ms. Levis is also a National Consultant for Social Skills Training for Schizophrenia and currently holds the position of VISN 2 Master Trainer in Social Skills. Ms. Levis received a Master in Social Work degree from Syracuse University and a Bachelor of Social Work from Keuka College.

# 4:15pm-5:00pm

Title: Using Disability Benefit Questionnaires to complete disability exams for hearing loss

Presenter: Kyle Dennis, PhD

#### Abstract

Disability Benefit Questionnaires (DBQs) have been developed to assist with the Compensation and Pension (C&P) process for Veterans and Service members. The Veterans Benefits Administration (VBA) has released approximately 80 DBQs, including one for audiology (hearing loss and tinnitus). These DBQs will reside within the Compensation and Pension Record Interchange (CAPRI) and some will be available to the general public. Additionally, contract providers are also required to use DBQs and negotiations are underway with the Department of Defense (DoD) to provide access to DBQs. Many questions have been raised regarding the completion and transmittal of examination results. To address this knowledge gap, this workshop is designed for audiologists to obtain information regarding this new process. This workshop will also provide audiologists an opportunity to ask questions about the DBQ and the C&P process in general and to provide feedback. Case studies and examples will be presented.

# **Learner Outcomes:**

- (1) Explain the purposes of the DBQ
- (2) Identify key features of the DBQ
- (3) Identify procedures and pitfalls in completing DBQ
- (4) Explain key forensic concepts

#### **Biography**

Kyle C. Dennis, Ph.D. is an audiologist currently assigned as a rehabilitation planning specialist in the National Audiology and Speech Pathology Program Office for the Department of Veterans Affairs (VA). Dr. Dennis received a Masters of Science degree from Tulane University in 1977 and a Ph.D. from Northwestern University in 1987.

Dr. Dennis began his VA career as a clinical audiologist at the New Orleans VA Medical Center and the VA Chicago Health Care System and went on to become the Chief of Audiology and Speech Pathology at that facility before coming to VA Central Office in 2000.

He has authored and co-authored numerous publications and papers and is a frequent presenter on a broad range of topics including evidence-based practice, productivity, clinical issues, practice management, and coding.

Dr. Dennis's professional memberships include the American Speech and Hearing Association and the American Academy of Audiology. He has served on numerous professional committees including the Health Care Economics Committee of the American Speech-Language-Hearing Association and the Coding and Practice Management Committee of the American Academy of Audiology.

He received a Presidential Award from the American Academy of Audiology in 2003 for his contributions to the profession, the Distinguished Service Award from Association of VA Audiologists in 2006, and the President's Award from Association of VA Speech-Language Pathologists in 2007.

# Tuesday, February 26

## 8:30am-9:30am

Virginia Ramachandran, Au.D., Ph.D.

Reporting and Documentation in an Electronic Medical Record

#### Abstract

With the advent of the electronic medical record, methods of communicating audiologic information have evolved. In addition, criteria for documentation continue to change over time. This presentation will include the rationale for and distinction between reporting and documentation. The latest evidence to support effective communication among healthcare providers will be discussed.

# **Learning Outcomes**

As a result of this activity, the participant will be able to explain the difference between "reporting" and "documentation".

As a result of this activity, the participant will be able to utilize and describe the APSO format for recording results.

As a result of this activity, the participant will be able to describe how various reporting formats either contribute to or detract from communication with other providers.

# Biography

Virginia Ramachandran, Au.D., Ph.D., is a senior staff audiologist and research coordinator in the Division of Audiology, Department of Otolaryngology - Head and Neck Surgery of the Henry Ford Health System in Detroit, Michigan. Dr. Ramachandran also coordinates the clinical education experiences of the audiology students at Wayne State University where she is an Adjunct Assistant Professor. She is past-president of the Michigan Academy of Audiology and serves as a member or the American Academy of Audiology's Education and Coding and Reimbursement Committees. Dr. Ramachandran is the Subcommittee Chair of the Professional Education section of the Strategic Documents Committee for AAA and is a member-at-large for the Executive Board of the Accreditation Commission for Audiology Education. She is an associate consulting

editor for Plural Publishing Inc. and is co-author of the Core Clinical Concepts in Audiology Basic Audiometry Learning Manual.

# 10:00am-12:00pm

Dr. Clark Walker

What Referring Physicians Look For In Audiologic Reports

#### Abstract

The relationship between Audiologists and physicians who refer patients for evaluation is complex. These physicians include Otolaryngologists, Primary Care Internists and Family Practice providers, Neurologists, etc. Each of these types of physicians has a different level of understanding and bias relating to hearing and balance concerns as well as different means of treating patients. Reporting of findings to these physicians must be appropriate for the physician's level of training. These must include specific data and interpretation of these data, and specific recommendations for treatment considerations must meet the clinical and practice parameters for each type of physician. Also, specific providers may want these findings to include various levels of interpretation. These topics are discussed in detail to include input from other attendees.

#### Learner outcomes

Audiologists will create reports with specific levels of data appropriate to the type of physician who is referring the patient.

Reports can be altered from a generic format and must fit the needs of referring providers. Specific language will be taught and utilized which is specific for the Audiologist and physician.

The specialty of the referring physician, their interest and skillset related to hearing and balance, and their range of treatment will direct the complexity of reporting. This will add greatly to the Audiologist's ability to help the patient.

Specific treatment recommendations will be reported according to the patient complexity, training of the referring provider, preferences of the referrer, etc.

# Biography

Dr. Walker is a board certified Ear, Nose and Throat Surgeon. He has extensive experience in all aspects of Head and Neck Surgery. He has particular interest in surgery for restoration of hearing, thyroid and neck surgery, sinus surgery and facial cosmetic surgery.

Dr. Walker was raised in Salt Lake City, Utah and received his Bachelor's degree in Biology, with emphasis in Neurobiology, from the University of Utah. He received his medical and surgical training through the military. He attended medical school in Bethesda, Maryland at the Uniformed Services University of the Health Sciences, graduating in 1990, and was commissioned a Lieutenant in the United States Navy. He completed his internship in General Surgery at the Naval Hospital, Oakland, California and then served for two years as a General Medical Officer on the U.S.S. Carl Vinson (CVN-70) a nuclear aircraft carrier. He then served as Battalion Surgeon for the 2d Battalion, 11th Marines, 1st Marine Division at Camp Pendleton, California.

After serving at sea and with the Marines, Dr. Walker was chosen for residency at the Naval Medical Center, Portsmouth, Virginia from 1994 to 1998. He was the Chief Resident from 1997 to 1998. He was honored as an

outstanding teacher during his residency.

Dr. Walker has been practicing in Colorado at Integrated Ear, Nose & Throat since January 2005. From 1998 to 2004 Dr. Walker served as a Staff Otolaryngologist at the Naval Hospital, Great Lakes, Illinois. He was the Department Head and Chairman of the Executive Committee of the Medical Staff. He also served as Director

for Surgical Services during Operation Iraqi Freedom. He held appointments as a Clinical Assistant Professor

at two Chicago area medical schools.

**Cochlear Implant Session** 

1:00pm-3:00pm and 3:30pm-6:00pm

Speaker: Cliff Hume

Session Title: Medical and Surgical Considerations in Cochlear Implantation

Abstract:

Dr. Hume will discuss the medical evaluation to determine cochlear implant candidacy and review surgical planning and complications. Additional considerations related to bilateral cochlear implantation and implantation of those with some residual hearing will also be discussed. This session will be appropriate for

beginner, intermediate as well as advanced practitioners.

Learning Outcomes:

As a result of this activity, the participant will be able to

1) Outline medical criteria for cochlear implantation and rationale for workup.

2) Discuss the medical factors that may impact ear, device and electrode choice.

3) Recognize the most common complications of cochlear implant surgery

Biography:

Clifford R. Hume MD, PhD

Clifford R.Hume is an otologist and cochlear implant surgeon practicing at the VA Puget Sound Health Care System and University of Washington since 2002. Dr Hume has served on the VHA Cochlear Implant Advisory Board and contracting review committee. His research interests include acoustic stimulation in hybrid cochlear implants, inner ear regeneration and optimization of cochlear implant stimulation strategies.

Speakers: Nancy Cambron and Maureen Wargo

Session Title: Update on the VA Cochlear Implant Program

Abstract:

Drs. Wargo & Cambron will describe cochlear implant services offered by the VA. They will discuss current status of the VHA cochlear implant program, and detail how to determine implant candidacy, refer potential cochlear implant candidates, establish a relationship with your local VA implant center and how to become a cochlear implant center. The revised cochlear implant clinical practice guidelines will be introduced and indications for bilateral implantation will be discussed. This session will be appropriate for beginner, intermediate as well as advanced practitioners.

# **Learning Outcomes:**

As a result of this activity, the participant will be able to

- 1) Identify candidacy criteria for cochlear implantation
- 2) Identify changes to the cochlear implant clinical practice guidelines
- 3) Identify indications for bilateral candidacy

# Biography:

Maureen L. Wargo, AuD, MBA

Maureen L. Wargo is the Audiologist Program Manager for the VA Pittsburgh Healthcare System and Field Instructor, University of Pittsburgh. Dr. Wargo is credentialed and privileged by the VA Pittsburgh Healthcare System to complete all facets of cochlear implant management and is responsible for coordinating all cochlear implant activities at VA Pittsburgh. Dr. Wargo has been actively involved in the field of cochlear implants for over 20 years and is a member of the VA/DoD Cochlear Implant Advisory Board. Dr. Wargo served as an FDA investigator at an investigational site for the Nucleus Prelingually Deafened Adults study, the CI24 implant, and the Advanced Bionics Severely Hearing Impaired study.

Nancy Cambron, AuD

Nancy Cambron chairs the VHA Cochlear Implant Advisory Board as well as the technical team for VA cochlear implant contracting. She has directed the cochlear implant program at the VA Puget Sound Health Care System in Seattle since 1993. Dr. Cambron participated in the VA Spectra study, the Nucleus 24 clinical trials, and is currently the principal investigator for a Cochlear Implant Telehealth study.

#### René H. Gifford

Bimodal hearing versus bilateral cochlear implantation: is there a functional difference?

# Abstract

Though many insurers have identified bilateral cochlear implantation as standard of care treatment for severe-to-profound sensorineural hearing loss, there are a number of adults making use of bimodal hearing (cochlear implant + contralateral hearing aid). Bimodal-hearing adults may choose this hearing modality given the level of residual hearing in the non-implanted ear or due to insurance restrictions (e.g. Medicare). This presentation will describe the results of a number of listening experiments conducted with bimodal and bilaterally implanted adults and attempt to provide answers regarding whether a functional difference is observed between these groups.

# Learning outcomes

As a result of this activity, the participant will be able to list current adult cochlear implant criteria.

As a result of this activity, the participant will be able to describe average performance for bimodal and bilateral implant patients on clinical measures of speech recognition.

As a result of this activity, the participant will be able to describe the functional differences between bimodal and bilateral implant patients.

# Biography

René Gifford, Ph.D. is an Assistant Professor at Vanderbilt University and Director of the Cochlear Implant Program and Associate Director of Pediatric Audiology at the Vanderbilt Bill Wilkerson Center. She has authored over 30 peer-reviewed publications, numerous book chapters, and a recently published book entitled Cochlear Implant Patient Assessment: Evaluation of Candidacy, Performance, and Outcomes. Her NIH-funded research focuses on electric and acoustic hearing, speech perception, speech and language development, binaural hearing with cochlear implants, and pre-implant prediction of postoperative outcomes for adults and children.

# **Hearing Conservation Session**

Part 1:

2/26

1300-1345 Hearing Conservation Basics (M. Grantham)

1345-1430 Tri-Service Unique Program Challenges (A. McArthur)

1430-1500 DOEHRS-HC Update (E. McKenna)

Part 2:

2/27

1200-1245 Multidisciplinary Nature of Hearing Conservation – How We Interface With IH, Safety, OH, Public Health (C. Duhon)

1245-1330 Tri-Service Question and Answer Panel (A. Merkley, L. Cook, E. McKinna)

Abstract: (Intermediate Level)

Hearing loss and tinnitus remain at the top of disability claims in the VA today. Prevention of hearing loss due to noise exposure is the goal of an effective hearing conservation program (HCP). OSHA and other military regulations provide guidance on how to manage an effective HCP. Each component of a HCP is vital, from noise surveys to engineering controls and hearing protection to monitoring audiograms and education. Each of the services (Army, Navy and Air Force) implement these program components differently based on service unique challenges. More and more military audiologists are working in HCP's that service a diverse population that spans each branch of service. This comes with unique challenges as we interface with different training and work environments, profiling systems and retention standards. As a profession, we also find ourselves working closely with our allied health and science partners in fields of Occupational

Medicine, Industrial Hygiene, Safety and Public Health to name a few. As members of a multidisciplinary team, we troubleshoot problems and develop courses of actions that may have implications across our sister services, the Department of Defense and conceivably the VA system.

As the Department of Defense manages OSHA standards and service component differences, the DOEHRS-HC system has had to upgrade its software to keep pace with these transformations. The recent upgrade to the single ear software will be discussed as well as some of its challenges and projected changes or upgrades. Finally, there will be a question and answer panel for an open discussion forum with experts in Hearing Conservation from each of the branches of service.

# **Learning Outcomes:**

- 1. As a result of this activity, the participant will be able to list and define the OSHA required components of a hearing conservation program (HCP).
- 2. As a result of this activity, the participant will be able to discuss at least three service unique differences between how HCP's are managed between the Army, Navy and Air Force.
- 3. As a result of this activity, the participant will be able to discuss challenges associated with the implementation of Joint Bases throughout the Department of Defense.
- 4. As a result of this activity, the participant will be able to describe how HCP managers interface with other members of Public Health and how to foster good working relationships with these partners.
- 5. As a result of this activity, the participant will be able to identify DOEHRS-HC system upgrades, why those upgrades occurred and when future upgrades may be fielded.

# Biography:

LTC Marjorie A.M. Grantham, Ph.D., currently serves as the Army Hearing Program Manager, U.S. Army Public Health Command. Her past assignments include the Army Research Laboratory, Science and Technology Acquisition Corps Advisor for the Afghanistan Theater of Operations, and Hearing Conservation Program Manager, Forts Lewis, Stewart, and Wuerzburg, Germany. LTC Grantham's current focus areas are: establishing evaluation criteria for non-linear hearing protection devices and Tactical Communication and Protection Systems (TCAPS), working with the DoD to establish better metrics for hearing loss prevention program analysis and improvement, supporting upgrades to DOEHRS-HC, establishing a national standard for impulse noise measurement, and including localization and speech intelligibility measures in fitness for duty evaluations.

MAJ John A. Merkley, Au.D., currently serves as the Army Hearing Program manager at Fort Carson, CO. His past assignments include Fort Drum, NY, Germany, and Public Health Command – Europe. MAJ Merkley was also deployed to Iraq for 15 months as an audiologist in 2007-2008. MAJ Merkley attended Utah State University and graduated in 1998 with a MS in Audiology. He graduated from Central Michigan University in May 2012 with his Au.D. MAJ Merkley is married to his wife MaRae and they have six children.

LT Amy E. McArthur is a Navy Audiologist currently serving as Department Head, Operational Audiology and Hearing Conservation Program Manager for US Marine Corps Base Camp Lejeune. She provides clinical, outreach, and preventive hearing conservation services to over 47,000 active duty Marines across 120 supported commands. Previously, she held the position of Department Head, Occupational Medicine at Naval Hospital Naples, Italy where she provided the full complement of audiological services for active duty, dependents, US civilian employees, and NATO forces.

LT Chris Duhon has been an audiologist for nine years, the last seven working for the US Navy specializing in the field of hearing conservation program management. His program management areas of responsibility have included Pensacola, FL Rota, Spain and San Diego, CA. He has worked with multiple Navy and Marine Corps fleet and shore commands as well as the civilian populations that support them. LT Duhon earned his Bachelor's degree from the University of Louisiana-Lafayette in 1999, his Masters degree from LSU Health Sciences Center-New Orleans in 2003 and his Doctorate in Audiology from the University of Florida in 2007.

Dr. Cook received her BS in Speech Pathology and Audiology (1977), and her Masters in Audiology (1979) from the University of Virginia. She earned her AuD through Pennsylvania College of Optometry/Salus University's Audiology Program (2002). She began her career as an educational audiologist at Virginia School for the Deaf and the Blind in Staunton VA where she worked for 6 years. In 1987, she accepted a position as Naval Hospital Bethesda's first hearing conservation program (HCP) manager. For 24 years, Dr. Cook wore two hats; working as both the hospital HCP manager, as well as the regional HCP manager for National Capital Region. In 2010, when the two positions were separated, she moved to Navy Medicine National Capital Area as regional audiologist, the position she currently holds. Dr. Cook is also an adjunct professor at the University of Maryland where she teaches a graduate-level course on Industrial Audiology and Noise Control. She was the 2012 recipient of the Elizabeth Guild Award from the Military Audiology Association.

Capt Elizabeth McKenna is a USAF Audiologist, currently serving as the Hearing Conservation Program Manager and subject matter expert at the Air Force School of Aerospace Medicine in the Epidemiology Consult Services of the Public Health and Preventive Medicine Department. Previous assignments include Flight Commander of Audiology at Sheppard AFB, Texas, and Clinical Audiologist at Lackland AFB, Texas. She received her Doctor of Audiology from the Northeast Ohio Au.D. Consortium after completing her clinical training at the Cleveland Clinic Foundation in 2007, and her Bachelors in Hearing, Speech and Language Sciences from Ohio University in 2003.

# 1:00pm-1:25pm

Steve Benton, Au.D.

Hearing Aid Considerations for Tinnitus Patients

#### Abstract

#### INTRODUCTION

Tinnitus relief from amplification has been well documented. In 2008, Kochkin and Tyler wrote reported that dispensers reported that 60% of their tinnitus patients who wore hearing aids reported at least some tinnitus relief while wearing hearing aids. 44% reported moderate-to-major improvement. These dispensers reported that 38% of their patients experienced no improvement in their tinnitus and 2% reported their tinnitus was worse tinnitus while wearing their hearing aids. Progressive Tinnitus Management, or PTM (Henry et al 2005, 2008), is a five-stage hierarchical process that assists the audiologist in identifying and providing the least intensive tinnitus management sufficient to provide the patient adequate relief. PTM focuses on the use of sound to manage tinnitus in problem situations. Level 2 of PTM includes amplification for appropriate patients.

The beneficial effects of amplification for patients with tinnitus are believed to result from the amplification of ambient environmental sounds (Background Sound). Such sound must be audible to be useful for tinnitus relief. Lindley (2006) reported that 70% of survey responders programmed their patients' aids using the manufacturer's "first-fit." Ricketts (2011) reported that when asked to guide the dispenser to provide a "natural sound quality," users guided the dispenser to provide essentially no gain. Kochkin et al (2011) reported that only 42% of hearing aid users reported having had verification (probe-tube measures) completed at the initial fitting. They also stated that "if comprehensive audiological services [best practices] are used to fit hearing aids, there is a stronger probability that the subject with tinnitus will derive benefit from their hearing aids to treat their tinnitus." Time constraints, habit and lack of understanding regarding the unique needs of hearing impaired tinnitus patients can hinder successful tinnitus management. This presentation describes best practices for tinnitus patients.

# **METHODOLOGY**

This presentation will examine the potential negative or positive impact of typical aspects of hearing aid fittings from the perspective of facilitating tinnitus management: counseling; use of manufacturer algorithms, patient subjective preference and in situ measurements in programming; frequency-lowering technologies; expansion; data log capabilities; and learning volume controls. These aspects of hearing aid fittings also will be discussed in relation to the Neurophysiological Model and PTM. Real-world examples will be provided.

#### RESULTS

The goal of this presentation is to encourage attendees to critically evaluate their own fitting paradigms and modify them as necessary to address the special needs of tinnitus patients so that their actions facilitate, rather than inadvertently hinder, successful tinnitus management. The critical evaluation and revision of

fitting practices for tinnitus patients strongly supports PTM: for most hearing-impaired tinnitus patients, hearing aids are the least intensive management option for adequate tinnitus relief.

# **Learning Outcomes**

Understand the underlying central auditory processes affected by amplification.

Understand how fitting using "best practices" can increase the likelihood of significant tinnitus relief from the use of hearing aids.

Understand how advanced hearing aid features, such as expansion, frequency lowering technologies, noise reduction technologies, automatic adaptation and learning volume controls, may impact potential tinnitus relief.

Understand how specific manufacturer's data log information can be utilized to facilitate improved patient counseling.

Understand how Bluetooth and other wired/wireless hearing aid accessories can facilitate implementation of Progressive Tinnitus Management (PTM).

#### Biography

Steve Benton, Au.D., has worked with the VA for over 20 years. He obtained a BA in Speech, Language and Hearing therapy from Louisiana Tech University in 1983, an MS in Audiology from the University of Alabama in 1984, an MS in Health Services Administration from Barry University in 1998 and an Au.D. from Salus University in 2002. Dr. Benton has presented numerous papers at regional, national and international scientific meetings. His primary research interests are tinnitus and hearing aid outcomes.

# 1:25pm-1:50pm

Tina Penman, Au.D.

Effects of Patient and Stimulus Factors on Speech in Noise Perception

#### Abstract

Introduction:

Many patients report subjective speech-in-noise difficulties, particularly in challenging environments such as busy restaurants, social gatherings, and the car. These difficulties affect individuals with hearing loss, aging individuals, and other individuals (e.g., patients with traumatic brain injuries, multiple sclerosis, etc.). However, word-recognition in background noise is not tested in many audiology clinics. Testing word-recognition in background noise will improve assessment and diagnosis of speech-in-noise difficulties, simulate real-world situations, and support speech-in-noise difficulties reported by patients. A better understanding of speech perception in noise will increase opportunities to counsel patients and family members about good communication strategies in challenging environments, rehabilitate patients through auditory training programs designed to improve performance, and prescribe hearing aids/assistive listening devices which improve signal-to-noise ratios (SNR) and signal levels.

To achieve the goal of better speech perception in noise, the effects of patient and stimulus factors must be understood first. Four of these factors were investigated including SNR, signal level, hearing status, and age in three groups of participants: younger normal-hearing, older normal-hearing, and older hearing-impaired. With a better understanding of these stimulus and patient factors, a more accurate assessment and diagnosis of speech-in-noise difficulties can occur. Then, individualized interventions and treatments can be implemented and patients can be successful once they leave the audiology clinic and enter the real world. Methodology:

Three groups of 20 participants each were tested: younger normal-hearing (ages 18-35), older normal-hearing (ages  $\geq$ 60), and older hearing-impaired (ages  $\geq$ 60). Northwestern University (NU-6) words were presented at four signal levels (50, 60, 70, and 80 dB SPL) and at seven SNRs (-10, -5, 0, +5, +15, +25, and +35 SNR) in speech-spectrum noise.

# Results:

Results indicate that SNR and hearing status are very important factors affecting speech perception in background noise. Age also affects speech perception while signal level is primarily important for audibility in the older hearing-impaired listeners. Interactions between these four factors will be addressed. Finally, the effects of phoneme scoring versus word scoring will also be discussed.

### **Learner Outcomes:**

- 1. To explain the effects of patient factors (aging, hearing impairment) on speech perception in noise
- 2. To explain the effects of stimulus factors (level, signal-to-noise ratio) on speech perception in noise
- 3. To compare and contrast phoneme and word scoring

# Biography

Tina Penman is an audiologist at the National Center for Rehabilitative Auditory Research at the Portland VA Medical Center and she currently serves as treasurer for the Association of VA Audiologists. She received a BS in behavioral neuroscience (2006) and clinical doctorate in audiology (2010) from Northeastern University. Current projects with Dr. Curtis Billings include the investigation of the relationship between auditory evoked potentials and behavioral measures. Other research interests include the effects of military, recreational, and occupational noise exposure on the auditory system, specifically skydiving noise exposure. Her long-term goal as an audiologist is to better serve the soldier and veteran populations through the application of research findings to clinical practices, the real world, and combat-related settings.

# 1:50pm-2:15pm

Steve Benton, Au.D.

Utility of Standard DPOAEs in the Evaluation of the Normal-Hearing Tinnitus Patient

### Abstract

Introduction

According to Jastrebof and Hazell (2004), "approximately 20% of patients with tinnitus have normal hearing. This is because changes too small to be detectable on a standard audiogram, if localized, can result in heterogeneity and trigger compensatory reactions of the auditory system, resulting in tinnitus." Shiomi et al (1997) stated that "in comparison to normal hearing and otologically normal subjects (including no tinnitus), DPOAE amplitudes were consistently reduced among tinnitus patients, even those with audiometrically normal hearing." Granjeiro et al (2008) also reported that "... DPOAE were abnormal in 68.4% of [tinnitus subjects] and in 50% of [non-tinnitus subjects]." The evidence led Hall (2000) to conclude that "... a clear pattern has emerged. OAEs are abnormal, or not detectable, in the frequency region of the tinnitus, even among persons with clinically normal audiograms," as did Parglialonga et al (2010) who concluded that "... abnormal OAEs, in particular at higher frequencies, in tinnitus subjects with normal hearing sensitivity ... outer hair cell dysfunction ... might thus be assumed in normal hearing tinnitus subjects." We were interested in evaluating the clinical utility of standard DPOAE measurements, rather than fine-structure measurements, during routine audiological evaluation of tinnitus patients with clinically normal hearing (thresholds  $\leq 25$  dB for 250-8000 Hz

### Methodology

The VA Computerized Patient Record System (CPRS) was reviewed for patients referred for primary complaint of tinnitus between 1 Jan 2011 - 31 Dec 2011 (12 months). All subjects had normal hearing thresholds (≤ 25 dB HL) at all frequencies .25-8 kHz. All subjects' DPOAEs were measured using a standard clinical Bio Logic Scout DPOAE protocol. As of this early writing, we have identified 37 subjects (74 ears).

### Results

Data currently are being analyzed. We are comparing subjects' absolute DPOAE amplitudes and signal-to-noise ratios to widely utilized normative data from both Boys Town and Vanderbilt. Subjects' DPOAE amplitudes were compared to a -2 SD criterion and a 5th percentile criterion from the data sets. The signal-to-noise ratios of subjects DPOAEs were compared to 3-dB and 6-dB criteria as well. Very preliminary data suggest that a criterion of DPOAE amplitude below the Vanderbilt 5th percentile may offer the greatest utility for identifying outer hair cell dysfunction in tinnitus patients with normal hearing. Depending on the final number of ears identified, we plan also to separate ears into groups based upon audiometric configuration (flat, downward sloping, upward sloping, notch-type, etc.). We plan to offer recommendations based upon the final results from all subjects.

# **Learning Outcomes**

Understand the prevalence of tinnitus among normal-hearing individuals.

Understand various measures of perceived tinnitus distress.

Understand various published criteria for judging the normalcy of DPOAEs

Understand the benefits and limitations of standard DPOAE evaluation in the evaluation of normal-hearing tinnitus patients.

### **Biography**

Steve Benton, Au.D., has worked with the VA for over 20 years. He obtained a BA in Speech, Language and Hearing therapy from Louisiana Tech University in 1983, an MS in Audiology from the University of Alabama in 1984, an MS in Health Services Administration from Barry University in 1998 and an Au.D. from Salus University in 2002. Dr. Benton has presented numerous papers at regional, national and international scientific meetings. His primary research interests are tinnitus and hearing aid outcomes.

### 2:15pm-3:00pm

Owen D. Murnane, Ph.D.

The Video Head Impulse Test

#### Abstract

Introduction. The head impulse test (HIT) is a bedside test used to identify peripheral vestibular deficits of the individual horizontal semicircular canals (SCCs) (Halmagyi and Curthoys, 1988). To perform the HIT, the patient is instructed to fix their gaze on an earth-fixed visual target (examiner's nose); the examiner rapidly rotates the patient's head in the horizontal plane to observe 'overt' catch-up saccades (large fast changes in eye position detected by the naked eye) after cessation of head rotation as an indirect sign of horizontal SCC hypofunction. The presence of 'covert' saccades (small fast changes in eye position that occur during head rotation), however, is not detected by the naked eye thereby reducing the sensitivity of the bedside HIT. The gold standard for recording eye movement during and after head rotation is the scleral search coil technique (Robinson, 1963; Aw et al., 1996). Although this technique largely overcomes the limitations of the bedside HIT, it is too invasive, expensive, and time-intensive for routine clinical use. In contrast, a high-speed digital video camera has recently been used to record the HIT (video head impulse test or VHIT) and provides a potentially more clinically useful alternative to the scleral search coil technique (Bartl et al., 2009; MacDougall et al., 2009; Ulmer et al., 2011). The preliminary results of the VHIT were highly correlated with the results obtained simultaneously with the scleral search coil (MacDougall et al., 2009) and several VHIT devices are currently in various phases of evaluation by the Food and Drug Administration. The purposes of this study were to assess both intra- and inter-examiner reliability and to establish a normal reference interval using the Otometrics VHIT device (Impulse).

Methods. Forty-five adult participants (18-30 years) with normal hearing, a negative history of vestibular or neurological disease, a negative history of cervical spine injury, and normal caloric test results will be recruited. The Otometrics VHIT device consists of a high-speed, infra-red video camera and an inertial measurement unit (triaxial linear accelerometer and gyroscopes) embedded in head-worn goggles, a computer, and the VHIT software. The system measures VOR gain (ratio of eye velocity to peak head velocity) and records both overt and covert saccades for head impulses in the plane of the horizontal SCCs. Participants will be seated, fit with the video goggles, and instructed to maintain their gaze on an earth-fixed visual target located on a wall at eye level at a distance of 1 m straight ahead. The examiner stood behind the participant and manually rotated their head in the horizontal plane (10 to 20°) in each direction (left and

right) resulting in the stimulation of each horizontal SCC. Each participant will undergo a minimum of 20 head impulses (number recommended by manufacturer) in each direction and the order of head impulse direction will be randomized. Each participant will be tested by each of two examiners (each examiner underwent the same pre-study training with the VHIT device) in 2 test sessions separated by at least 1 day. The examiner order was counterbalanced for each test session.

Results. Data have been obtained from 30 participants. The inter-examiner reliability (reliability between examiner 1 and examiner 2) for VOR gain across the 2 test sessions was excellent [intra-class correlation coefficient (ICC) = .815 for right horizontal head impulses and ICC = .879 for left horizontal head impulses]. The intra-examiner reliability for VOR gain was also excellent (ICC = .813 for examiner 1 and ICC = .845 for examiner 2. The following descriptive statistics (mean  $\pm$ sd) for VOR gain were obtained: examiner 1, right horizontal (1.02  $\pm$ 0.10); examiner 1, left horizontal (0.97  $\pm$ 0.09); examiner 2, right horizontal (1.05  $\pm$ 0.11); examiner 1, left horizontal (0.98  $\pm$ 0.08)

### **Learning Outcomes**

Participants will be able to describe the principles in vestibular anatomy and physiology that are the basis for the head impulse test.

Participants will be able to describe the video head impulse test procedure.

Participants will be able to describe the response metrics of the video head impulse test.

Participants will be able to describe some of the possible patterns of video head impulse test results obtained from patients with vestibular loss.

# **Biography**

Dr. Murnane is an audiologist who is Associate Chief of Staff for Research and Director of the Auditory Electrophysiology Laboratory at Mountain Home VAMC. He is an Associate Professor in the Department of Audiology and Speech Language Pathology at East Tennessee State University and a co-investigator on the VA RR&D-funded Auditory and Vestibular Dysfunction Research Enhancement Award Program (REAP) at Mountain Home. Dr. Murnane's research interests concern the clinical application of electrophysiological measures of auditory and vestibular function.

### 3:30pm-3:50pm

Laura A. Cote, Au.D.

Team Approach to Follow Up Care

# **Abstract**

INTRODUCTION: Our Audiology clinic identified a two part issue we targeted for improvement. First, patients were often incorrectly scheduled in the technician cleaning/repair clinic when they wished an adjustment. This resulted in patient dissatisfaction as they then had to be rescheduled for a follow up appointment and wait an additional six weeks to have their problems addressed. Secondly, patients were often incorrectly scheduled in follow up clinic when they had a minor repair or problem. This confusion

between appointment types was a direct contributor to poor access in follow up clinic as Audiologists were often spending patient care time on basic repairs that the technician could have handled. Training of scheduling staff occurred repetitively but did not yield a solution to the problem. The average wait for the follow up clinic was holding at six weeks. This was a significant factor causing dissatisfaction with our patient population. With the addition of new staffing, which was complete by August 2012, delay dropped to about two weeks. However, we felt we could do better. With the construction of our new Audiology department we decided to put a new team walk-in service into operation.

METHODOLOGY: Three rooms were designated for the walk in care, two were treatment rooms with a hearing aid fabrication/lab in between the two exam rooms. Two technicians were assigned to work with one audiologist daily. The Audiologist was responsible for the direction and management of the care plus all programming issues. The technicians performed technician duties such as hearing aid repair, cleaning, worn/dirty part replacement, impressions, ear cleaning, and setting the patient up for programming as requested. Patients were seen in order of check in and had their concerns addressed within the one appointment. Scheduled follow up appointments with an Audiologist were still available for patients who only preferred to see a particular Audiologist or who did not want to utilize the walk in clinic. Walk in clinic is held morning and afternoon daily except for Wednesday and Sunday.

RESULTS: Patients have access to hearing aid follow up care as they needed it. In addition, the team approach allowed one Audiologist to oversee two technicians which permitted each professional to work to the highest degree of their scope of practice. Productivity was increased and waits for follow up care decreased from two weeks to same day availability. This model also reduced the significant administrative burden of contacting patients for appointment reminders and improved our missed opportunity rates. Walk in staff also serves as a buffer for when providers call in sick to minimize patient cancellations. Additional benefit includes increased patient and staff satisfaction.

### **Learning Outcomes**

By the end of the session attendees will understand the benefits of a team care approach to patient care

By the end of the session attendees will know the coding and documentation processes followed in the team
care clinic.

By the end of the session attendees will understand the disadvantages and roadblocks to implementing team care.

# Biography

Dr. Laura Cote obtained her Master of Arts degree in Audiology at Wichita State University in 1986. She served as an Audiologist in the United States Air Force for seven years and resigned her commission to marry and pursue family life. She worked in the private sector for 5 years, during which time she had two children. She joined the VA in 1999 as chief of the Audiology Department for the Southern Nevada Healthcare System. While there she completed her AU.D. degree from AT Still University School of

Medicine in 2006. She continues to serve as the chief in Las Vegas and has been instrumental in the planning and opening of the new VA medical center in Las Vegas NV.

# 3:50pm-4:10pm

Alan Sias, Au.D.

St. Cloud VAMC Mobile Audiology Unit Part 2

#### **Abstract**

The St. Cloud VAMC applied for, and was granted a Rural Health Initiative grant to purchase a mobile audiology unit. In 2011 we began using it. At the 2011 JDVAC we presented Part 1. At that time we discussed some of the issues that we had in purchasing and preparing. We had just begun using it at the time of that conference. This poster session is designed to show some of the benefits that we have experienced as well as some of the issues that we have run into. We will discuss the money saved and the numbers of actual veterans seen in the van since we began using it in 2011.

# Learning Outcomes

Participants will be able to identify the benefits/issues involved in obtaining a mobile audiology clinic. Participants will be able to identify issues involved in setting up the clinics associated with a mobile audiology clinic.

Participants will be able to identify methods used to determine whether or not their clinic is a candidate for a mobile clinic.

# **Biography**

Alan Sias, AuD, is the Lead Audiologist at the St. Cloud VA Health Care System, St. Cloud, MN. He has worked at the VA since 2008. He previously worked for a hearing instrument manufacturer in the technical support and training area as well as sales to government agencies. He has also worked in rural Montana, had positions in hospital, clinic, ENT practice, and owned his own practice.

# 4:10pm-4:30pm

CDR Antony Joseph, MSC, USN, AuD, PhD,

Fleet Hearing Loss Prevention Project: Hearing Protection Field Performance

#### **Abstract**

### Introduction

A pilot investigation focused upon the effect of individual hearing loss prevention (IHLP) training on the attenuation performance of commercial off-the-shelf hearing protection devices (HPDs).

# Methodology

Real ear attenuation at threshold (REAT) and above threshold (REAT2) measurements was used to determine the earplug fitting skills for 100 Sailors and Marines on across multiple platforms. Several types of HPDs, both formable and premolded, were used by listeners. Sailors were first asked to insert their

customary HPD, and a measurement was taken using REAT or REAT2 methodology. Then, a very short training program was presented to Sailors that consisted of earplug selection, insertion, and verification assistance. Video clips obtained from a HPD manufacturer were incorporated into the training presentation. To conclude training, a supervised practice session was facilitated by the examiner, and a final trial of REAT or REAT2 measurements was administered.

#### Results

Analysis included a comparison of earplug-attenuation performance before and after training, between ships, and between REAT and REAT2. Findings from this population will be used to establish policy for hearing protection programs in floating platforms, including selection, fitting, and training that supports optimal use of hearing protection devices.

# **Learning Outcomes**

Discuss the method in which a very short training program was developed that consisted of earplug selection, insertion, verification assistance, and simulated hearing loss, in the form of video clips obtained from various sources, coupled with a supervised practice session facilitated in the field.

Describe several methods for the collection and comparison of earplug attenuation data for workers using hearing protection devices, specifically Commercial-Off-The-Shelf (COTS) earplugs.

# Biography

Active Duty Naval Officer for 22 years, Commander Joseph completed his Doctor of Audiology degree at Central Michigan University (2001) and Doctor of Philosophy degree at Michigan State University (2004). He was elected by his fellow board certified audiologists to the American Board of Audiology Board of Governors from 2009 to 2012 and served as Board Chairman in 2011. He was selected as the American Academy of Audiology CAOHC Council representative in 2011. Dr. Joseph conducted the first randomized clinical trial of hearing protection devices, published in Joseph et. al. (2007) "Effects of Training Modality on Earplug Performance," a collaboration with the National Institutes for Occupational Safety and Health (NIOSH) and Michigan State University. He has authored articles in occupational medicine, substance abuse, and pandemic influenza, and has published in the American Journal of Audiology on Most Comfortable Loudness Level clinical-experimental protocols. Seasoned in executive medicine, he served as Director of Public Health, US Naval Hospital Okinawa, Japan, and Officer in Charge (OIC), Naval Branch Health Clinic, Jacksonville, Florida, including deployed OIC Troop Medical Clinic, Camp Buehring, Kuwait. He presently is an Operational-research Audiologist with the Navy Environmental and Preventive Medicine Unit FIVE, San Diego. Dr. Joseph is the Editor for the CAOHC *Update* newsletter, and is active on both the Publications Committee and Professional Supervisor of the Audiometric Monitoring Program Committee.

# 4:30pm-4:50pm

Marjorie A.M. Grantham, Ph.D.

Tactical Communications and Protective Systems: Update on Efforts in Research and Acquisition

#### Abstract

This will be a two-part, joint presentation by a panel of USA, USN, and USAF researchers and their counterpart acquisitions subject matter experts, providing a) an overview of current research in this area and b) how TCAPS technologies make it into what acquisitions call a "program of record", where long-term funding and sustainment are handled by acquisition program managers. Over the years, the process and vehicles for manufacturer and vendor collaboration with DoD and VA researchers, audiologists in the field, and troops have varied greatly from rigorous to attempts to gain a foothold wherever possible. Audiologists will benefit from hearing the latest in TCAPS research and technology updates, as well as from how to best interact with acquisition programs and auditory researchers, in order to get the most from this family of technologies providing hearing protection, communications facilitation, auditory situational awareness, improved SNR, and even GPS location information

# **Learning Outcomes**

Attendees will be provided an overview of current research in this area.

Attendees will define how TCAPS technologies make it into what acquisitions call a "program of record", where long-term funding and sustainment are handled by acquisition program managers.

# Biography

LTC Marjorie A.M. Grantham, Ph.D., currently serves as the Army Hearing Program Manager, U.S. Army Public Health Command. Her past assignments include the Army Research Laboratory, Science and Technology Acquisition Corps Advisor for the Afghanistan Theater of Operations, and Hearing Conservation Program Manager, Forts Lewis, Stewart, and Wuerzburg, Germany. LTC Grantham's current focus areas are: establishing evaluation criteria for non-linear hearing protection devices and Tactical Communication and Protection Systems (TCAPS), working with the DoD to establish better metrics for hearing loss prevention program analysis and improvement, supporting upgrades to DOEHRS-HC, establishing a national standard for impulse noise measurement, and including localization and speech intelligibility measures in fitness for duty evaluations.

### 5:10pm-5:40pm

Ben Sierra, Au.D.

Auditory Neuropathy Spectrum Disorder (ANSD) - Intervention and Management

# **Abstract**

Introduction

The purpose of this presentation is to review and discuss current concepts in the assessment, intervention and management of Auditory Dys-synchrony/Auditory Neuropathy.

Methodology

This 30 minutes Power Point presentation will open with a review of current literature focusing on the pathophysiology, diagnosis, and clinical implications of Auditory Neuropathy Spectrum Disorder.

Next, the speaker will discuss diagnostic assessment techniques along with recommendations for intervention and management of patient diagnosed with ANSD.

The presentation will also review of two case studies illustrating contrasting intervention/management strategies. Finally, the author will offer his conclusions and recommendations for intervention and management.

# **Learning Outcomes**

Review and discuss current peer reviewed literature pertinent to AN/AD.

Familiarize the audience with the characteristics and audiometric findings of AN/AD spectrum

Provide a detailed discussion and review of case studies illustrating intervention and rehabilitation outcomes

# Biography

Dr. Sierra, had a long and distinguished military career that started in 1969 when he enlisted in the Puerto Rico, US Army National Guard. He completed a Master of Science in Audiology at the School of Medicine, University of Puerto Rico in 1974. He joined the United States Air Force (USAF) Biomedical Sciences Corps (BSC) in 1975. His Air Force career encompassed a wide range of medical assignments, including clinic, hospital, medical center Audiology Clinics, the Armstrong Laboratory and Headquarters Air Staff. He served as Audiology consultant in two major commands, as well as Consultant to the Air Force Surgeon General in Audiology and Speech Pathology. In 1994, he received the Military Audiology Association, Elizabeth Guild Award for outstanding contributions to military hearing conservation. Dr. Sierra served as the Chief of Technology Transfer, Armstrong Laboratroy, Brooks AFB, Texas, from 1994 to 1995. Subsequently he was selected by the Air Force Surgeon General to serve as Deputy Director, Biomedical Sciences Corps, HQ USAF/SG, Bolling Air Force Base, D.C. where he was responsible for policy and programming oversight of over 2600 Biomedical Sciences Corps personnel. Dr. Sierra holds the distinctin of being the first Air Force Audiologist promoted to the rank of Colonel. He concluded his military service as Director of the Audiology and Speech Pathology Clinic, 59 MDW, Lackland AFB where he retired 1 July 2005.

# 1:00pm-3:00pm

Earl Johnson, AuD, PhD

The Clear Clinical Relevance of Prescriptions for Hearing Aids and Various Hearing Losses

# Abstract

This presentation will report on matters of clinical relevance with regards to comparisons of common generic prescriptive methods for hearing aids. Generic prescriptions have been designed to accommodate any configuration of hearing loss as well as various types (sensorineural, mixed, or conductive); more

importantly, such prescriptions have application to all hearing aid brands and models. Data from adult participants will be reported for measures of speech intelligibility and loudness as well as sound quality preference judgments and preferred gain adjustments. Considering prescriptive recommendations in combination with patient outcome measures can likely improve clinical decision making via the complement of both objective and subjective data.

#### Learner outcomes

- 1. As a result of this activity, the participant will be able to identify similarities and differences in common hearing aid prescriptions on matters such as factors that affect prescribed gain and subsequent speech intelligibility and loudness.
- 2. As a result of this activity, the participant will be able to identify reasons for the preference judgments of Veterans between prescription alternatives.
- 3. As a result of this activity, the participant will be able to identify reasons for not chasing low-frequency gain in open-fit hearing aids when no actual real-ear gain is achieved.
- 4. As a result of this activity, the participant will be able to identify why the fitting range of hearing aid is highly dependent upon the prescription recommendations of gain.
- 5. As a result of this activity, the participant will be able to identify why the MPO of the hearing aid is important when fitting losses with large conductive components.

# **Biography**

Earl Johnson, AuD, PhD is an advanced practice audiologist for the U.S. Department of Veterans Affairs Medical Center (VAMC) in Mountain Home, TN. He also participates in AuD curriculum instruction at East Tennessee State University as an Assistant Professor. Much of Dr. Johnson's research experience has been focused on the efficacy and effectiveness of hearing aid product features and signal processing as well as hearing aid dispensing and practicing trends. During his Master's and PhD educational training, he spent five and a half years studying with Drs. Todd Ricketts, Ben Hornsby, and Gus Mueller in the Vanderbilt University Dan Maddox Hearing Aid Research Laboratory. Clinically his experience is well-rounded following completion of a fellowship year with Director of Audiology, Gary Jacobson, PhD at the Vanderbilt University Medical Center and a clinical doctorate of Audiology degree from the University of Florida. Additional professional clinic experience in the past five years includes responsibilities in almost all diagnostic and rehabilitation clinics at the Mountain Home Veterans Affairs Medical Center. Dr. Johnson has been a funded VA investigator

on a Career Development Award – Level I with mentorship from Drs. Richard Wilson and Harvey Dillon. In the summer of 2010, Dr. Johnson completed a 2.5 month training stage at the Australian National Acoustics Laboratory. His current research encompasses the topic of modern prescription theory in conjunction with signal processing features such as frequency lowering and directional arrays. His research is intended to reduce complex research design into clinically-feasible procedures that can facilitate and improve decision making at the level of each patient's individualized care.

# Wednesday, February 27

### 8:30am-9:30am

Colleen Le Prell, Ph.D.

Development of a Therapeutic to Protect the Inner Ear: From Animal Models to Human Trials

# Abstract

Noise-induced hearing loss (NIHL) is a significant clinical, social, and economic issue. We now know that noise-induced free radical formation leads to cell death and hearing loss. This key finding has opened the door to novel interventions that reduce the effects of noise on the inner ear. Many laboratories have now demonstrated that free radical scavengers ("antioxidants") reduce NIHL in animal subjects. Scientific data supporting the use of specific agents to prevent or reduce NIHL will be reviewed. Human clinical trials are a critical next step. Efforts to date by others and clinical trials in our laboratory will be discussed.

# **Learning Outcomes**

As a result of this activity, the participant will be able to:

- 1. describe cell death and neural loss after noise trauma
- 2. describe the role of oxidative stress in noise-induced hearing loss
- 3. summarize novel therapeutic opportunities

# **Biography**

Colleen Le Prell, Ph.D., is an Associate Professor in the Department of Speech, Language, and Hearing Sciences at the University of Florida (UF). She has served as Director of the Center for Hearing Research since 2007. Current research activities seek to identify mechanisms of cell death after insult to the inner ear (using acute noise or aminoglycoside antibiotic insult, or slowly progressive aging); data are used to identify potential otoprotective agents. These on-going efforts have led to two issued patents (owned by University of Michigan). Funding from the Department of Defense supports current research assessing potential prevention of age-related hearing loss (ARHL) and noise-accelerated ARHL using two therapeutics. A second active area of research is translation of agents that are successful in animal models to clinical testing. This has resulted in development of novel stimuli and signal delivery paradigms (patent pending, UF), and

development of a laboratory-based paradigm for "screening" proposed novel agents using temporary threshold shift. Clinical trials using this paradigm have been funded by the National Institutes of Health (NCT00808470) and industry (NCT01444846). Dr. Le Prell has been invited to present her research findings nationally and internationally, and has lectured on the challenges of translational research in Otolaryngology. She served as lead editor on "Noise-induced hearing loss: scientific advances," (Springer, 2011), and has contributed chapters to several hearing conservation texts that will be published in the next year. Dr. Le Prell teaches a course on Hearing Conservation at UF.

#### 10:00am-11:00am

Mark D. Packer, M.D.; Kyle C. Dennis, Ph.D.

DoD Hearing Center of Excellence (HCE): Bringing visibility to the invisible injury

#### Abstract

The DoD and VA have been partnering to establish the Hearing Center of Excellence (HCE) to enhance readiness and improve health and quality of life across the continuum of auditory-vestibular injuries. This mission, possible through bidirectional sharing of information between Departments, will smooth transition highlighting evidence and outcomes that will promote best standards and facilitate collaborative translational research. Systems analyses and strategic communication with targeted audiences will help develop a clearinghouse of information that will facilitate integrated care, teamwork, and resource sharing all focused on the hearing and balance preservation and rehabilitation needs of our Service members and Veterans.

# Learning outcomes

As a result of this activity, the participant will be able to:

- -Quantify the hearing loss and auditory system injury burden on the DoD and VA.
  - -Understand the mission and organization of the HCE.
- -Know how to contact HCE coordinator team.
- -Access HCE website and communicate via list serve and social media.

# **Biography**

Col (s) Mark Packer is a neurotologist currently serving as the Executive Director of the congressionally directed DoD Hearing Center of Excellence. He graduated from the Uniformed Services University of the Health Sciences in 1995 as a member of the Alpha Omega Alpha medical honor society. He completed a general surgery internship at Wright State University in Dayton Ohio in 1996, and received board certification in Otolaryngology Head and Neck surgery after finishing his residency training in the San Antonio Uniformed Services Health Education Consortium in 2002. Most recently he completed fellowship training and board certification in neurotology and cranial base surgery at The Ohio State University in 2008 and has been practicing within the San Antonio Military Health System since that time.

Dr. Packer has been an active clinician, instructor and researcher. He has authored several text book chapters, directed six temporal bone surgical dissection courses, and four humanitarian surgical ear missions

in South and Central America. Intermixed with his medical training Dr. Packer has had the opportunity to serve in the operational Air Force as a flight surgeon attached to the Air Force Special Operations Command serving as the Emergency response team leader, and the Medical Director of Education and Training and the NBC Rapid Response Team leader. Working with joint task forces in this capacity he experienced first-hand the functional paradox between hearing prevention and communication in austere noise environments.

Kyle C. Dennis, Ph.D. is an audiologist currently assigned as a rehabilitation planning specialist in the National Audiology and Speech Pathology Program Office for the Department of Veterans Affairs (VA). Dr. Dennis received a Masters of Science degree from Tulane University in 1977 and a Ph.D. from Northwestern University in 1987.

Dr. Dennis began his VA career as a clinical audiologist at the New Orleans VA Medical Center and the VA Chicago Health Care System and went on to become the Chief of Audiology and Speech Pathology at that facility before coming to VA Central Office in 2000.

He has authored and co-authored numerous publications and papers and is a frequent presenter on a broad range of topics including evidence-based practice, productivity, clinical issues, practice management, and coding.

Dr. Dennis's professional memberships include the American Speech and Hearing Association and the American Academy of Audiology. He has served on numerous professional committees including the Health Care Economics Committee of the American Speech-Language-Hearing Association and the Coding and Practice Management Committee of the American Academy of Audiology.

He received a Presidential Award from the American Academy of Audiology in 2003 for his contributions to the profession, the Distinguished Service Award from Association of VA Audiologists in 2006, and the President's Award from Association of VA Speech-Language Pathologists in 2007.

# 12:00pm-1:30pm and 2:00pm-4:00pm

Faith W. Akin, Ph.D.

Courtney Hall, P.T., Ph.D.

Sharon Polensek, M.D.

A Multi-Disciplinary Approach to Management of the Dizzy Patient

# Abstract

This session will focus on a multi-disciplinary approach to the assessment and treatment of the dizzy patient from the perspective of a neurologist, physical therapist, and audiologist. Specifically, best practices and clinical usefulness will be described for vestibular laboratory testing (horizontal canal and otolith function),

neurological assessment and formulation of differential diagnosis, and gait and balance assessment. The theoretical bases and current approaches for vestibular rehabilitation will be discussed.

# Learning objectives:

Participants will be able to describe the best practices and clinical utility of vestibular function and balance assessment.

Participants will be able to summarize expected outcomes and approaches to vestibular rehabilitation.

Participants will be able to describe the components of a neurological assessment of the dizzy patient.

Participants will be able to describe the unique contributions of audiology, physical therapy, and neurology to the management of the dizzy patient.

### **Biography**

Faith W. Akin, Ph.D. is the director of the Vestibular/Balance Laboratory at the Mountain Home VA Medical Center and an Associate Professor in the Department of Audiology and Speech Pathology at East Tennessee State University. Her research in the area of vestibular assessment is funded by the Rehabilitation Research and Development Service of the Veterans Health Administration.

Courtney Hall, P.T., Ph.D. is a Research Health Scientist at the Mountain Home VA Medical Center and an Associate Professor in the Department of Physical Therapy at East Tennessee State University. Dr. Hall has focused her research program toward better understanding age-related (both normal and pathological) changes in balance control and how best to intervene therapeutically to prevent loss of mobility and falls. She has published on various risk factors- including motor, sensory and cognitive factors- and their impact on mobility and falls for a number of years. Her current research is geared to developing novel interventions to reduce dizziness and fall risk in older adults and is funded by the Rehabilitation Research and Development Service of the Veterans Health Administration.

Sharon Hartman Polensek, MD, PhD, the Chief of Audiology and Speech Pathology at the Atlanta VAMC, is also Assistant Professor of Neurology at Emory University School of Medicine. She obtained her medical degree at the Medical College of Ohio and a PhD in anatomy from Indiana University with emphasis in the study of the auditory central nervous system. She completed her residency in neurology at the Baylor College of Medicine and was certified by the American Board of Psychiatry and Neurology in 2004. Following her neurology residency, Dr. Polensek completed her neurotology fellowship at Emory University. She also served as an otolaryngology resident house officer for five years at the University of Michigan prior to doing her neurology residency. Dr. Polensek received her bachelor's degree in Audiology and Speech Pathology in 1984 from Florida State University and her master's in Hearing Science from Purdue University in 1988. Her research focuses on the diagnosis and management of vestibular disorders.

# 12:00pm-12:30pm

Capt. Giselle M. Ostolaza

Do Patients diagnosed with ANSD receive benefit from cochlear implantation?

#### Abstract

Objective: This presentation will discuss and summarizes literature based evidence in support of cochlear implantation for patients with ANSD.

Methodology: This PowerPoint slides presentation will be 20 minutes in length and will discuss in detail the results of a special topics project undertaken by the author. A literature review was performed using search engines such as pubmed and ebscohost to include peer-reviewed articles in professional scientific journals. The articles selected/used met the search criteria to diminish bias.

Results: The results obtained were consistent with the research question criteria. All studies reviewed revealed that the use of the cochlear implant treatment should be considered in cases of ANSD.

### Learning outcomes

Discuss current peer reviewed literature trends regarding benefit of Cochlear Implants vs hearing aids in ANSD patients.

Contrast Pros and Cons of hearing aids vs cochlear implants in ANSD patients

Provide recommendations for the intervention and management of ANSD

patients

Biography

Capt. Giselle M Ostolaza is a fourth year audiology extern in the US Air Force assigned to Wilford Hall Ambulatory Surgical Center, Lackland AFB, and San Antonio Texas. She is completing the requirements to obtain the Doctor of Audiology Degree from the University of Puerto Rico, School of Medicine. Capt Ostolaza has served as President of the Student Academy of Audiology local Chapter for two years and she is the president of her graduating class. She is a contributor to a research study sponsored by the Department of Health Commonwealth of Puerto Rico on Universal Neonatal Hearing Screenings to determine the average age of hearing loss diagnosis for the general pediatric population in Puerto Rico. She is married and has a 4-year-old son, Diego.

### 12:30-1:00pm

Joyce Crawford, AuD, Mark Packer, Travis Pfannenstiel, Daniel Williams

New Developments in Implantable and Bone Conduction Technology

### Abstract

Hearing loss affects approximately 30-60 million people in the U.S. Estimates reveal that only 20% of individuals who are hearing aid candidates actually seek consultations for amplification, and from this group 15% do not wear their devices. A significant number of individuals with hearing loss do not utilize hearing aids for cosmetic reasons, or because of the social stigmas associated with conventional amplification, or the restrictions hearing aids may place on a person's everyday lifestyle. Additionally, problems with acoustic feedback, sound quality, occlusion, hearing in background noise, maintenance, dexterity, and cost contribute to noncompliance. There is another set of "non-users" who also may benefit from conventional hearing aids but who are unable to successfully utilize hearing aids due to external auditory canal congenital deformities, post-operative structural changes of the outer and middle ear, skin allergies, and chronic otitis externa. Within the military population, precluding conditions may be burns of the head and neck, traumatic atresia or stenosis, or difficult compatibility with prosthetic limbs. Until recently, the audiologist and the otologist had few options for successfully remediating complicated cases with any type of amplification technology. In the last decade there has been a surge of promising implantable and prosthetic devices that are well suited for this unique population. The hearing health care team at San Antonio Military Health System has been dedicated to providing state-of-the-art care for patients previously identified as poor hearing aid candidates. This presentation will explore some new options, including middle ear implants, bilateral bone anchored hearing aids, and an in-the-mouth device that utilizes the natural bone conduction characteristics of the upper molars.

# Learning outcomes

- 1) Attendees will be able to list candidacy criteria for middle ear implants, and identify criteria that are predictive of poor outcomes or exclusionary candidacy criteria.
- Attendees will understand the criteria for determining poor hearing aid outcomes or minimal hearing aid benefit.
- 3) Attendees will be able to describe current research results with regard to cochlear implants for patients with unilateral severe to profound sensorineural hearing loss.
- 4) Attendees will be able to define summation, squelch, and head shadow effects as it relates to single-sided deafness and expected effect changes with cochlear implantation vs. BAHA for SSD.
- 5) Attendees will be able to list differences between two middle ear implants: the VSB and the Esteem.

#### Biography

Dr. Joyce Crawford is a research audiologist for the Hearing Center of Excellence (HCE). She earned her Masters in audiology from the University of North Carolina in 1978 and her Doctorate of Audiology (Au.D.) from Arizona School of Health Sciences in 2010. Dr. Crawford began her audiology career as an Army Medical

Service Corps officer at Ft. Hood, Texas, where she managed the Hearing Conservation program and provided clinical audiology services. Over the past 30 years, Dr. Crawford has worked for public schools, for major medical centers, and private practices. Her primary interests lie in cochlear implants and auditory processing disorders.

Capt Daniel Williams is Chief of Implantable Devices, in the Department of Audiology at Wilford Hall Ambulatory Surgical Center (WHASC). Dr. Williams earned his Doctorate of Audiology (Au.D) from East Tennessee State University in 2012. From 2008 to 2011, Dr. Williams served as a graduate audiology clinician at the Mountain Home VA Medical Center where his responsibilities included hearing aid fittings, ABR, comprehensive vestibular evaluations, tinnitus evaluations and counseling and cochlear implant and osseointegrated hearing systems assessments and fittings. Prior to his career as an audiologist, Capt Williams served as an avionics technician for the Air National Guard and the U.S. Navy. He served in deployments to Afghanistan and Northern Arabian Gulf in support of Operation Iraqi Freedom.

Col(s) Mark Packer is the Executive Director for the Hearing Center of Excellence (HCE). He graduated from the Uniformed Services University of Health Sciences in 1995 as a member of the Alpha Omega Alpha medical Honor society. He completed a general surgery internship at Wright State

University in Dayton, Ohio, in 1996, and was board certified in Otolaryngology Head and Neck surgery upon finishing his residency training in the San Antonio Uniformed Services Health Education Consortium in 2002. He graduated from fellowship training in neurotology and cranial base surgery at Ohio State University in 2008, and currently practices as a board certified neurotologist within the San Antonio Military Medical Consortium. Dr. Packer has been an active clinician, instructor, and researcher. He has authored several text book chapters, directed five temporal bone surgical dissection courses and three humanitarian surgical ear missions in South and Central America. Dr. Packer has served in the operational U.S. Air Force as a flight surgeon attached to the 16th Special Operations squadron.

MAJ Pfannenstiel is Chief, Otology/Neurotology and Skull Base Surgery, San Antonio Military Medical Center. He earned his Medical Degree in 2002 from Loyola University. He completed his residency in 2007 in otolaryngology at Wayne State University and Michigan Ear Institute. Dr. Pfannenstiel served at the Naval Medical Center, San Diego in the Department of Otolaryngology from 2009 to 2012. He is an adjunct assistant professor of surgery at The Uniformed Services University of Health Sciences. Dr. Pfannenstiel has authored a text book chapter on vestibular testing and published numerous peer reviewed studies in otolaryngology journals. Dr. Pfannenstiel has presented at audiology conferences on hearing preservation and antioxidant therapy and diagnosis and management of acoustic neuroma.

# 1:00pm-1:30pm

Extended High Frequency Audiometry

Danny Allen Secor, Capt USAF, BSC Audiology Fellow Abstract:

Introduction: The concept of extended high frequency audiometry is something that all audiologists are taught in graduate school but it is seldom used unless performing serial audiograms for patients undergoing treatment involving ototoxic medications in a hospital setting. In this brief presentation the basics of the procedure, the appropriate applications of its use, and new literature on the topic will be reviewed and discussed.

Methodology: The presentation will be 20 minutes in length and the use of a PowerPoint presentation will be implemented. A literature review using search engines such as pubmed and ebscohost was performed to include peer-reviewed publications in journals such as Ear & Hearing, Journal of the Acoustical Society of America, and the Journal of the American Academy of Audiology.

Results: The results of the literature review will be discussed in the presentation.

# Learning outcomes

Attendees will be able to define the basics of extended high frequency audiometry, the appropriate applications of its use, and new literature on the topic.

Biography

Danny Allen Secor, Capt USAF, BSC Audiology Fellow

Graduated from University of Hawaii at Manoa in 2009 with a B.S. in Communication Sciences and Disorders and a B.A. in Psychology. Currently an audiology fellow in the USAF and will have received an Au.D. degree from the University of Texas at Dallas in May 2013.

# 2:00pm-2:30pm

Preserving Hearing in the Military with an Educational Training Kit Lynne Marshall, PhD

### Abstract:

Introduction

Most military hearing loss could be prevented by the use of appropriate hearing-protective devices, yet most military personnel are not compliant. Current training tools for personnel are not effective. This project addresses the Navy's directive to improve awareness of the effects of noise on hearing and increase individual accountability in preventing noise-induced hearing loss. Through development of hearing-loss and tinnitus simulations to demonstrate future hearing impairment, incorporation of testimonials from hearing-impaired peers and superiors, the goal is a fresh, engaging, and motivational experience. These tools are being developed for DoD-wide application with separate versions for Army,

Navy, Marine Corps, and Air Force. The first version is aimed at the Army population.

### Methodology

Military audiologists were solicited for and provided recommendations. Recommended features were the ability to provide: (a) personalized individualized training; (b) additional training that they do not have the time or resources to do now; (c) technician level training under their supervision without losing the advanced capabilities of an audiologist; and (d) group training sessions in rooms with loudspeakers as well as for individual training under headphones (best audio quality). Military audiologists also helped to design and critique modules, and provided sites and support for filming.

#### Results

Currently 53 modules and sub-modules in the Military Health Preservation-Army Training Kit have been developed. The kit consists of both instructional and interactive modules. Testimonials, in which military members discuss their experiences with hearing loss, have been recorded. The audiologist can select modules in the Presentation Designer, which are then played in the Presentation Player. There is also a separate tool the Interactive Demonstration Tool ② that allows the audiologist to switch quickly between hearing-loss and/or hearing protection simulations, progressively change the hearing loss on the fly, and/or design tinnitus composed of tones and/or a noise band. The software is installed on stand-alone laptop computers that are bundled with headphones, loudspeakers, and a projector in a single Pelican case for transport. The various modules and hardware components make this kit versatile to audience size and educational requirements.

# Learner outcomes

Attendees will be able to describe the basics of the educational training kit.

Attendees will be able to understand and use the different types of modules available in the kit to help increase hearing protector compliance amongst military personnel.

### **Biography**

Dr. Lynne Marshall is a Senior Research Audiologist at the Naval Submarine Medical Research Laboratory in Groton, Connecticut. She obtained master's degrees in Speech Pathology and in Audiology, and a Ph.D. in Speech and Hearing Science at the University of Kansas. Following a clinical fellowship year in audiology at the Upstate Medical Center in Syracuse, New York, she spent several years in Omaha, Nebraska, where she was Clinical Coordinator of Audiology at the University of Nebraska Medical Center and a faculty member at the University of Nebraska. She also held a postdoctoral position at Boys Town National Research Hospital. Her initial work at the Naval Submarine Medical Research Laboratory involved auditory-sonar research and now includes the potential role of otoacoustic emissions in hearing-conservation programs, educational tools using hearing-loss simulation for hearing-conservation applications, a model to estimate the life-cycle costs of hearing loss for ship and weapons systems designers, and implementation of an enhanced hearing-conservation program on a specific Navy ship.

# 2:30pm-3:00pm

Presenter: CDR Antony Joseph, MSC, USN, AuD, PhD

Generating Prevalence Data by Use of Noise Notch Calculations in Normal and Hearing Impaired Military

Personnel

### ABSTRACT:

Introduction

In point of fact, clinical and occupational audiologists have considered high-frequency troughs or "notches" in a patient's audiometric data to be a salient marker for hazardous noise exposure, as well as a diagnostic indicator for noise-induced hearing loss.

# Methodology

Historical data from the DOEHRS-HC database served as a reference data for analysis. A sample of individuals with normal hearing thresholds and positive for notched configuration was selected for specific analysis of their annual screening data. A matched control sample of individuals who were negative for notched configuration was analyzed for comparison.

### Results

Notched audiometric configurations may be an indicator of over-exposure to hazardous levels of occupational and/or extra-occupational noise. Normal-hearing individuals, who were identified as 'positive' for notched configuration, were followed and compared to a control group, and the incidence of later development of a notch was investigated. When present in individuals demonstrating hearing within normal limits, noise notches can be used as an early warning system for patients at risk within the Hearing Conservation Program.

#### Learning Objectives:

Discuss the process by which DOEHRS-HC data were analyzed to generate prevalence statistics that may be used by occupational audiologists and other providers who practice within Hearing Loss Prevention Programs.

Discuss the prevalence of noise notches observed in personnel with 'normal hearing thresholds.'

Discuss methods of using these findings for targeted wellness efforts and risk reduction initiative.

# Biography:

Active Duty Naval Officer for 22 years, Commander Joseph completed his Doctor of Audiology degree at Central Michigan University (2001) and Doctor of Philosophy degree at Michigan State University (2004). He was elected by his fellow board certified audiologists to the American Board of Audiology Board of Governors from 2009 to 2012 and served as Board Chairman in 2011. He was selected as the American Academy of Audiology CAOHC Council representative in 2011. Dr. Joseph conducted the first randomized clinical trial of hearing protection devices, published in Joseph et. al. (2007) "Effects of Training Modality on Earplug Performance," a collaboration with the National Institutes for Occupational Safety and Health (NIOSH) and Michigan State University. He has authored articles in occupational medicine, substance abuse, and pandemic influenza, and has published in the American Journal of Audiology on Most Comfortable Loudness Level

clinical-experimental protocols. Seasoned in executive medicine, he served as Director of Public Health, US Naval Hospital Okinawa, Japan, and Officer in Charge (OIC), Naval Branch Health Clinic, Jacksonville, Florida, including deployed OIC Troop Medical Clinic, Camp Buehring, Kuwait. He presently is an Operational-research Audiologist with the Navy Environmental and Preventive Medicine Unit FIVE, San Diego. Dr. Joseph is the Editor for the CAOHC *Update* newsletter, and is active on both the Publications Committee and Professional Supervisor of the Audiometric Monitoring Program Committee.

# 3:00pm-4:00pm

Navy Wounded Warrior Project

Dr. Kelly Paul, Regional Hearing Conservation Program Mgr, Navy Medicine West

Contact info: kelly.paul@med.navy.mil or 619-767-6578

Dr. Lynn Cook, Regional Hearing Conservation Program Mgr, National Capital Area

Contact info: <a href="mailto:lynn.cook@med.navy.mil">lynn.cook@med.navy.mil</a> or 301-319-4959

### Abstract

Responsibility for medical aspects of the Navy & Marine Corps Hearing Conservation Program falls under the Bureau of Medicine and Surgery, an Echelon 2 command, which is further divided into Echelon 3 regions: Navy Medicine East, Navy Medicine West and National Capitol Area. Each of these regions has a Regional Hearing Conservation Program Manager (HCPM) who oversees, inspects and supports Navy Occupational Audiology and Hearing Conservation Program policies, practices and services within these regions. These Regional Program Managers will present a state-of-the-regions address to the Navy Audiology community. Methodology

Based on findings from Safety and Occupational Health Management Evaluations (SOHME) conducted during fiscal years 2011-2012, Regional HCPMs will discuss a summary of issues, concerns, challenges and best practices that were discovered in the areas of Occupational Audiology and Hearing Conservation Program Management. Thoughts, ideas and proposed resolutions to these issues, as well as methods for program enhancement will be presented and discussed in group format. In instances where policy or protocol does not currently exist, Regional HCPMs will take issues forward to BUMED for action. Feedback will be sought from the community on new ideas to prevent or mitigate noise-induced hearing loss, and to understand roadblocks toward accomplishing this mission. Hot topics and current issues will also be discussed, to include:

- Impact of recent policy change to incorporate 100% of all USMC into the HCP to include the Medical Readiness Reporting System and lessons learned from the effected Commands
- Appropriate use of the Medical Matrix to satisfy occupational medicine requirements while minimizing unnecessary workload on the provider
- Hearing conservation coding issues

- Enforcement of 50% of Occupational Audiologist time spent in outreach and prevention efforts and the new paradigm shift that results (more training, HPD fittings, worksite visits and less clinic)
- Status of new Hearing Conservation Course materials
- Contribution to and use of the Hearing Conservation Toolbox as a shared resource
- · Staffing issues or concerns
- Update on new DOEHRS software
- Suggestions for special projects or resources
- Formulation of the centrally funded ROES hearing aid ordering system.
- MOHCAT disbursement schedule and consideration for DRMO or redistribution
- Opportunity for participation on Advisory Board
- Update on Fit Check and discussion on importance of including some kind of measurement of HPD effectiveness in clinical evaluations

# Results

This group presentation on the state of the occupational audiology community and regional issues will serve to update all Audiologists and HCPMs within the regions on current issues and provide necessary communication and feedback toward resolving roadblocks and longstanding challenges to the mitigation of noise induced hearing loss in the Navy and Marine Corps.

# Learning Objectives

- Identify some of the challenges and program weaknesses that led to the development of the Wounded Warrior Hearing Conservation Program initiative.
- 2. List some of the major Wounded Warrior initiatives and accomplishments that have supported and enhanced the Navy/USMC Hearing Conservation Program.
- 3. Discuss some of the remaining challenges and the way ahead for improving programs/outcomes and preventing noise-induced hearing loss.

#### **Biography**

Dr. Kelly Paul is a civil service Occupational Audiologist with the US Navy. She received her Bachelor's and Master's degrees in Audiology at East Carolina University, and her Doctorate degree from Central Michigan University. She served 20 years in the military (Army & Navy) as an Audiologist and has worked extensively in Hearing Conservation and Occupational Audiology. She is currently employed as the Regional Hearing Conservation Program Manager at Navy Medicine West in San Diego, CA.

Dr. Lynn Cook is an occupational audiologist with the Department of the Navy. She received her B.S. in Audiology and Speech Pathology at the University of Virginia in 1977, followed by M.Ed. in Audiology at UVa in 1979. She completed her AuD at Salus University in 2002. After 7 years as an educational audiologist at the Virginia School for the Deaf and the Blind, she began her Navy career in 1987 as the first audiologist/Hearing Conservation Program manager at Naval Hospital Bethesda, simultaneously serving as Regional Audiologist for National Capital Region. She served in that capacity for 25 years, and is currently employed as the Navy's Regional Audiologist, Navy Medicine, National Capital Area.

# 4:00pm-4:30pm

Landing on the Roof – Second Approach

Kurt Yankaskas

#### Abstract

Introduction: Flight operations are the life blood of US Navy aircraft carriers. This presentation revisits the efforts by the Office of Naval Research (ONR) and other organizations in the US Navy to mitigate noise and develop advanced hearing protection on aircraft carriers. It reviews the impact of noise induced hearing loss (NIHL) and military operations. It includes an overview of the most extensive and detailed measurements on an aircraft carrier evaluating a new damping material using 3-D acoustic holography at-sea. These successful tests will lead a new noise mitigation strategy on the 03 Level (gallery deck). This presentation provides the current status of engineering efforts in mitigating below deck noise levels and examines some of the medical information relating to hearing loss, hearing conservation and response to high noise environments. It reviews other DoD noise sources as well. The information presented herein will be used in the design of future aircraft carriers and other DoD systems and set the investigation standards for advanced hearing protection.

Landing on the Roof (LOTR) was presented at the National Hearing Conservation Association (NHCA) 2003 Conference in Dallas and was well received. It has been updated continuously with the most recent medical and pharmacological research. As previously, LOTR is a multi-media presentation designed for the larger sessions. It is nominally 50 minutes but can be tailored to be shorter to meet time constraints. Methodology: Ongoing research and field trials associated with the Office of Naval Research (ONR) NIHL program include noise mitigation efforts on US Navy aircraft carriers. A number of noise mitigation trials and methods used in 2011 and 2012 will be discussed.

Results: Noise and vibration levels on the gallery deck of a NIMITZ-class carrier were reduced by the application of a novel spray-on damping material. In addition, novel noise and vibration measurement techniques were developed and employed to measure the noise baseline and improvements from use of the damping material. Measurements were performed during representative at-sea aircraft flight operations and associated events.

# Learning outcomes

- 1. Provide the audience with an awareness of the broader implications of noise induced hearing loss in military populations.
- 2. Make the audience aware of Office of Naval Research and US Navy efforts to decrease noise exposures and NIHL.
- 3. Provide the audience with a better understanding of the ONR Code 34 Warfighter Protection Department mandate, plans, and needs.

# **Biography**

Kurt Yankaskas is the Noise Induced Hearing Loss Program Manager for the Office of Naval Research. He manages a research portfolio investigating noise induced hearing loss and tinnitus, methods to protect Sailors and Marines and how to reduce the noise of military equipment. He has research products that will further the understanding of the mechanisms of noise induced hearing loss and tinnitus, develop micro-acoustic processors for advanced hearing protection, develop the next generation of hearing protection devices with integrated communications/dosimetry and noise control applications for ships and tactical jet engines. He has extensive experience in shipboard noise control.

Kurt Yankaskas graduated from Rensselaer Polytechnic Institute in 1974 with a BS degree in biology and Florida Atlantic University in 1977 with a BS in Ocean Engineering. In his spare time, Mr. Yankaskas is a certified multi-engine, instrument rated pilot and certified scuba instructor. He has been involved in the International Submarine Races for 12 years as safety judge and technical director (www.isrsubraces.org). He is also very active in the Boy Scouts of America and serves the National Capitol Area Council as a camp director.

# 4:30pm-5:00pm

Determining OSHA Reportable Hearing Loss Erin Artz, Capt USAF

### **Abstract:**

Within a hearing conservation program, making a provider determination as to the occupational impact on a hearing loss is one of the most challenging. The determination is an important one, calling on input from multiple specialties and the provider's best problem solving skills. Also complicating matters is that, over the years, there has been varied guidance to audiologists as to what constitutes an occupationally related hearing loss (OSHA reportable).

A review of past and current guidance on OSHA reportable hearing loss was completed and most recent recommendations determined. Case studies were selected to demonstrate how recommendations and guidance are applied to hearing loss identified in a hearing conservation program, and how information from multiple specialties is integrated into making an accurate provider determination.

Though it may appear the determination is a subjective one, with understanding of the information provided by supporting specialties and the most recent guidance, the answer should be much clearer. Being able to

accurately determine the occupational impact on hearing loss can aid in reliably identifying trends and preventing further hearing loss to that individual and the others in the working area.

**Learner Outcomes:** 

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

1. Identify the most current criteria for identifying occupational hearing loss as defined by OSHA

2. Successfully integrate information from multiple specialties to aid in determining cause(s) of hearing

loss

3. Analyze hearing loss cases using current criteria and input from other specialties to reliably identify

occupational hearing loss

**Biography** 

Capt Erin Artz, Au.D. is the Hearing Conservation Program Manager at Robins AFB, Georgia. Capt Artz was

commissioned to the Air Force in Sept 2009 as an Active Duty Audiologist and completed her fourth year

externship at Wilford Hall Medical Center, Lackland AFB, Texas. Capt Artz completed her doctoral degree

from the University of Texas at Austin in May 2010. She is currently a fellow of the American Academy of

Audiology and board certified by the American Speech-Language Hearing Association. Her primary areas of

interests include hearing conservation and diagnostic testing.

**Poster Sessions** 

Tuesday 2/26/13 4:00pm-5:30pm

Title: Reducing Noise Levels in the NICU

Presenter: LCDR Paula Johnston, Au.D., CCC/A

ABSTRACT:

Introduction

Although noise levels in Neonatal Intensive care Units (NICU) usually do not reach established hazardous

levels, noise at lower levels has been found to cause physiological disturbances in pre-term infants cared for

in NICUs. As a result, guidelines for NICU noise levels were established to mitigate the effects of noise on pre-

term infants. The goal of the project was to determine noise levels in the Naval Medical Center San Diego

NICU; and if found to exceed guidelines, implement a program to reduce noise levels to meet the guidelines.

Methodology

An initial noise survey of the NICU was conducted by an industrial hygienist. Noise sampling was conducted

in different areas of the NICU with a sound level meter to determine intensity levels of different sounds.

Sampling over a period of time was also conducted in different rooms or "pods" to determine average noise

levels as well as peak measurements. Noise data collected indicated hourly noise levels exceeded established guidelines in two out of three pods. A noise mitigation program was implemented in the NICU. Following implementation of the program, noise measurements were again conducted in the same areas to determine effectiveness of mitigations strategies.

Results

The noise mitigation program was shown to successfully rduce noise levels overall in the NICU. The program whas been adopted by NICU staff to maintain noise levels at recommended guidelines.

Learning Objectives:

Attendees will gain an understanding of why monitoring noise levels in NICU pods is important.

Attendees will gain an understanding of the use of noise mitigation teams.

Attendees will gain an understanding of noise mitigation strategies that were successful in reducing NICU noise levels.

Short Biography:

LCDR Paula Johnston, Occupational Audiologist, naval Medical Center San Diego,

LT Brenda Sharpe, Industrial Hygienist, Naval Medical Center San Diego

Title: Fleet Hearing Loss Prevention Project: Hearing Protection Field Performance

Presenters: CDR Antony Joseph, MSC, USN, AuD, PhD; CDR Joel Bealer, MSC, USN

ABSTRACT:

Introduction

A Pilot investigation focused upon the effect of individual hearing loss prevention (IHLP) training on the attenuation performance of commercial off-the-shelf hearing protection devices (HPDs).

Methodology

Real ear attenuation at threshold (REAT) and above thresholds (REAT2) measurements were used to determine the earplug fitting skills for 100 Sailors and Marines across multiple platforms. Several types of HPDs, both formable and premolded, were used by listeners. Sailors were first asked to insert their customary HPD, and a measurement was taken using REAT or REAT1 methodology. Then, a very short training program was presented to Sailors that consisted of earplug selection, insertion, and verification assistance. Video clips obtained from a HPD manufacturer were incorporated into the training presentation. To conclude training, a supervised practice session was facilitated by the examiner, and a final trial of REAT or REAT2 measurement was administered.

Results

Analysis included a comparison of earplug-attenuation performance before and after training, between ships, and between REAT and REAT2. Findings from this population will be used to establish policy for hearing

protection programs in floating platforms, including selection, fitting, and training that supports optimal use of hearing protection devices.

Learning Objectives:

Discuss the method in which a very short training program was developed that consisted of earplug selection, insertion, verification assistance, and simulated hearing loss.

Discuss the methods of using video clips and supervised practice sessions in the field.

Describe several methods for collection and comparison of earplug attenuation data for workers using hearing protection devices, specifically Commercial-Off-The-Shelf (COTS) earplugs.

Short Biographies:

CDR Antony Joseph is an Operational-Research Audiologist affiliated with Navy Environmental & Preventive Medicine Unit FIVE. CDR Joel Bealer is an Operational Audiologist affiliated with Navy Environmental & Preventive Medicine Unit TWO.

Title: Definition of a New Auditory Fitness for Duty Trigger-Referral Protocol

Presenters: CDR Antony Joseph, MSC, USN, AuD, PhD

ABSTRACT:

Introduction

Navy medical surveillance programs are fundamentally designed to identify and monitor personnel exposed to stressors in the workplace that are capable of causing poor health outcomes with the purpose of preventing occupational disease and injury. The noise surveillance program, commonly referred to as the Navy Hearing Conservation Program, screens hazardous noise-exposed Navy and Marine Corps annually, and has historically applied an arbitrary criterion, the "270-dB Rule," for identification of individuals requiring referral for AFFD assessment, counseling, and disposition.

Methodology

A novel protocol was developed that incorporated clinically-relevant criteria. Active duty Navy audiometric data were extracted from the DOEHRS-HC data repository and submitted to the 270-dB Rule as well as the new protocol. To compare the performance of these trigger systems, audiometric data extracted from the population were analyzed, and referral rates, demographics, and other characteristics of each trigger were explored.

Results

Using Hearing Conservation Program audiograms, the new protocol identified patients in the program that required referral for Auditory Fitness for Duty management. The new trigger ultimately referred significantly fewer patients when compared to the 270-dB rule in the selected cohort, which should render decreased burden for patients and providers. Concurrently, the new method was more sensitive and specific, and integrated a new feature of clinical-operational relevance.

Learning Objectives:

Discuss the method by which an evidence-based Auditory Fitness for Duty (AFFD) trigger-referral protocol was developed.

Discuss the method of validation of the AFFD by use of actual patient audiometric thresholds data.

Discuss the operational definition of the new AFFD trigger-referral system and how it compares to the 270dB rule.

Short Biographies:

CDR Antony Joseph is an Operational-Research Audiologist affiliated with Navy Environmental & Preventive Medicine Unit FIVE.

Title: Generating Prevalence Data by Usw of Noise Notch Calculations in Normal and Hearing-impaired Military Personnel

Presenter: CDR Antony Joseph, MSC, USN, AuD, PhD

ABSTRACT:

Introduction

In point of fact, clinical and occupational audiologists have considered high-frequency troughs or "notches" in a patient's audiometric data to be a salient marker for hazardous noise exposure, as well as a diagnostic indicator for noise-induced hearing loss.

Methodology

Historical data from the DOEHRS-HC database served as a reference data for analysis. A sample of individuals with normal hearing thresholds and positive for notched configuration was selected for specific analysis of their annual screening data. A matched control sample of individuals who were negative for notched configuration was analyzed for comparison.

Results

Notched audiometric configurations may be an indicator of over-exposure to hazardous levels of occupational and/or extra-occupational noise. Normal-hearing individuals, who were identified as 'positive' for notched configuration, were followed and compared to a control group, and the incidence of later development of a notch was investigated. When present in individuals demonstrating hearing within normal limits, noise notches can be used as an early warning system for patients at risk within the Hearing Conservation Program. Learning Objectives:

Discuss the process by which DOEHRS-HC data were analyzed to generate prevalence statistics that may be used by occupational audiologists and other providers who practice within Hearing Loss Prevention Programs.

Discuss the prevalence of noise notches observed in personnel with 'normal hearing thresholds.'

Discuss methods of using these findings for targeted wellness efforts and risk reduction initiative.

Short Biography:

CDR Antony Joseph is an Operational-Research Audiologist affiliated with Navy Environmental & Preventive

Medicine Unit FIVE.

Title: Selection of an Inventory of Hearing Protection Devices by use of Noise Exposure Data

Presenter: CDR Antony Joseph, MSC, USN, AuD, PhD

ABSTRACT

Introduction

Most commands carry one or two hearing protectors for their personnel and this has been common practice

for supply managers, primarily done to reduce their bottom line. Given that a wide range of hearing

protectors exist commercially, and are readily available in government supply systems, hearing conservation

program managers should be well aware of the opportunities that exist for expanding device selection for

their noise-exposed personnel.

Methods

Research was conducted to develop a slate of protectors that are available through government sources.

These protectors were tested for their real-work noise reduction performance. A tool was constructed to

match the slate with hazardous noise levels found in Navy and marine Corps work-centers.

Results

A demonstration of the use of the HPD inventory tool permits noise-intensity levels, hearing protection

targets, worker conditions, number of personnel exposed, and product cost to be accounted for

simultaneously, which should provide hearing conservation program managers, in partnership with line

supply representatives, to determine which products should be made available to noise-exposed personnel.

This process was designed to optimize access to suitable hearing protection.

Learning Objectives:

Discuss the process by which occupational noise exposure data was used to develop an inventory of

recommended HPDs to enhance options for members enrolled in Hearing Loss Prevention Programs.

Discuss the purpose for developing this type of HPD inventory tool and its benefits.

Discuss the recommended methods of implementation of the inventory.

Short Biography:

CDR Antony Joseph is an Operational-Research Audiologist affiliated with Navy Environmental & Preventive

Medicine Unit FIVE.

Title: Vasovagal syncope during audiologic procedures

Presenter: Erin Coomes, Au.D., CCC-A

ABSTRACT:

Introduction

In the past three years, the Nashville Audiology Clinic has had five patients experience vasovagal syncope episode during audiologic procedures. The proposed poster presentation will highlight the main points of defining vasovagal syncope, elucidating the autonomic process of syncope, identifying potential triggers, and describing the Standard Operating Procedure (SOP) adopted by the clinic in response to such episodes.

At the initial event, a code blue is called. If possible, the patient is moved to a safer position in a chair or lying flat on the floor. The patient is kept calm until the code team arrives and they are taken for evaluation and treatment in the Emergency Room. Documentation of the initial event is placed in CPRS on the date of the episode. All future CPRS notes are headed with the statement "Veteran has had a vasovagal response to an audiologic procedure."

Learning objectives

Methodology

Attendees will be able to define vasovagal syncope and understand the autonomic process leading to syncope.

Attendees will learn potential audiologic triggers to vasovagal syncope.

Attendees will be able to describe and/or implement a proposed Standard Operation Procedure for patients with known vasovagal episodes due to audiologic triggers.

Short Biography:

Erin Coomes, Au.D., CCC-A is affiliated with the VA Tennessee Valley Healthcare System on the Nashville Campus.

Title: Determining hearing impaired adults' preferences of sound quality among the current prescriptive methods.

Presenters: Christine Brown, AuD Student; Earl Johnson, Au.D, Ph.D.

Abstract:

In light of recent revisions to generic presciptive hearing aid formulas resulting in NAL-NL2, DSL m[i/o] v.5.0 and CAM2, Johnson and Dillon (2011) completed a comparison of the prescriptions similar to the classic sty by Byrne, et al, (2001) identifying differences in prescriptive techniques of that time. Johnson and Dillon (2011) found that predicted SII across 5 configurations of hearing losses among the current revisions were highly comparable, all predicting an average greater than 99% sentence recognition performance in quiet when SII values were converted to percentage scores via a transfer function. SII analyses were also completed for each prescription in speech and noise conditions of various signal-to-noise rations (SNRs) and no difference among the prescriptions was present. The methods did vary in predicted overall loudness.

When seeking patient satisfaction with hearing aids, there must be a balance between verifying output of the hearing aid to an evidence-based prescriptive method and fitting to patient preference (e.g. a speech intelligibility and loudness trade off which is often encompassed in and assessment of sound quality).

Provided the earlier reported findings of Johnson and Dillon (2001), the paired comparison method of sound quality assessment is ideally suited to determine whether patient fit with the various prescriptions

realize a difference and, more importantly, have a repeated preference. The purpose of this research was to determine hearing impaired adults' preference of overall sound quality among the current revisions of generic prescriptions, NAL-NL2, DSL m[i/o], and CAM2 for average conversational level input using a wide dynamic range non-linear hearing aid. By using a single-blind, counter-balance, randomized, paired-comparison technique, preference judgments of the three prescriptive methods for overall sound quality in speech in quiet, speech in noise and music was assessed.

Learning Objectives:

Discuss the early results of the preferences documented.

Discuss the analysis used in comparing the prescriptions.

Discuss the practical needs of the patient's preferences in relation to an Audiologic clinic.

Short Biographies:

Christine Brown in an AU.D. Student at East Tennessee State University.

Earl Johnson, Au.D., Ph.D., is and advanced Practice Audiologic, US Department of Veteran Affairs and Assistant Professor, east Tennessee State University.

Title: Case study: Audiological and Vestibular Management of a Multiply Involved TBI Patient

Presenters: Jillian Earnes, Au.D; and Heather E. Rudisill, Au.D.

Abstract:

Introduction

This poster presentation is a case study from the Captain james A Lovell Federal Health Care Center (FHCC) of a multiply involved OEF/OIF veteran with two separate Traumatic Brain Injuries (TBI). The patient is a 43 year old male who was referred to Audiology due to hearing loss and dizziness in 2012. He began experiencing dizziness in 2003, secondary to a head injury sustained in Iraq after hitting his head in a helicopter on an emergency landing. He was diagnosed with a mild TBI in 2009, along with post-traumatic stress disorder, numbness of the hands, hypertension and memory problems. In March 2012, the veteran was involved in a severe motorcycle accident and sustained a likely temporal bone fracture, facial fractures, cerebrospinal fluid leak, and mild TBI. Since the accident he has reported no hearing in his left ear, constant left tinnitus, vertigo, and balance difficulties.

# Methodology

The case methodology explores the history and process by which the veteran was evaluated through multiple disciplines, including PM&RS, ENT, Neurology, and Audiology. The Audiology evaluation, including VNG and Posturography, and the process used to accurately diagnose multi-canal BPPV will be highlighted. In addition, the methods used to treat accordingly the vestibular and audiologic components of the veteran second TBI will be explored and rationale for fitting CROS amplification will be discussed.

Results

This case study demonstrated how multi canal BPPV and asymmetric sensorineural hearing loss were managed successfully for an OEF/OIF veteran with history of multiple TBIs.

Learning Objectives:

Discuss methodology used to study results for comparison

Discuss general TBI symptoms briefly, as it pertains to audiologic needs

Discuss testing methods used in the case.

Short Biography:

Jillian Earnest Au.D. and Heather E. Rudisill Au.D. are audiologists at the Captain James A Lovell Federal Health Care Center in North Chicago, Illinois.

Title: a Joint Mission: Captain james a Lovell Federal Health Care Center

Presenters: Heather E. Rudisill, Au.D.; Barbara Conway, M.S.; Jillian Earnest, Au.D.; Lori Howe, Au.D.; David Jagodzinski, Au.D.; Dominique Matthews, AU.D.; Amy Rymer, Au.D.; Janet Toole-Trexler, M.S; Darrin Worthington, Au.D.

Abstract:

Introduction

At the 2009 JDVAC the Audiology Department at North Chicago VA Medical Center gave a presentation on the then upcoming merge between the North Chicago VA and the Naval Health Clinic Great Lakes, a first-of-its-kind partnership between the US Department of Veterans Affairs and the Department of Defense. The integration was completed in 2010, and we now present an update on the Captain James A Lovell Federal Health Care Center (FHCC), the first fully integrated federal health care facility.

Methodology

The path to integration began over a decade ago, and consisted of several phases that led to the commissioning of the Lovell FHCC in October 2010. Health care providers at Lovell FHCC are civilian and active duty, working side-by-side to provide health care services to active duty, dependants, veteran, and retired military.

As the first audiology team at a fully integrated federal health care facility, we have seen changes to the scope of practice, patient demographics, including pediatrics, and documentation of medical records. In this poster presentation we illustrate what face of audiology looks like at Lovell FHCC, including the programs and services offered (e.g. audiological and hearing aid services, vestibular diagnostics and rehabilitation, central auditory processing assessments, and tinnitus management among other), department structure and staff, the new population that is being served at Lovell FHCC, as well as other challenges and successes we've encountered along the way.

Result

The successful partnership in creating the Lovell FHCC can be attributed to extensive cooperation at all levels between VA and DoD.

Learning Objectives

Discuss obstacles encountered in merging two different heath care facilities

Discuss staffing needs that emerged

Discuss some divergent needs noted among the populations that are served by the Lovell FHCC

Short Biographies:

The presenters are the entire team of audiologists at the Lovell FHCC

Title: A Comparison of Audible RMS Frequency Bandwidth from NAL-NL2 and DSL m[i/o] Prescriptive

methods for Adult and Pediatric Hearing Aid fitting

Presenters: Jennifer Trammell; Earl Johnson, AuD, PhD

Abstract:

Variations of audible bandwidth have been shown to affect sound quality and speech recognition performance for adults and children (Moore & Tan, 2003; Rickets, et al., 2008; Stelmachowicz, et al.,2001). A model based comparison of two routinely used prescriptive methods used, NAL-NL@ and DSL m[i/o], for adults found that predicted average Speech Intelligibility Index (SII) values were similar across both prescriptions (Johnson & Dillon, 2011). In hearing aid fittings, the degree to which audibility is restored for a specific configuration of hearing loss varies among generic hearing aid prescriptions as a result of differences in rationale regarding the contribution of audibility and bandwidth to speech intelligibility (Johnson & Dillon, 2011). In pediatric hearing aid fittings, similar SII results were found. The purpose of this study is to report audible root mean square (RMSS) frequency bandwidth differences between NAL-NL2 and DSL m[i/o] for soft, average and loud speech input levels for a variety of adult and pediatric hearing losses.

LEARNING OBJECTIVES

Discuss methodology used for comparison of the prescriptions

Discuss instrumentation used in the testing and analysis

Discuss obstacles encountered in studying this population range

Short Biographies:

Jennifer Trammell is an Audiology Student at East Tennessee State University/Mountain Home VAMC Earl Johnson, Au.D., Ph.D., is and Advanced Practice Audiologist with the US Department of Veterans Affairs and Assistant Professor at East Tennessee State University

Title: Audiological Management of the service member/Veteran with mTBI and co-morbid PH disordes

Presenters: Jo Manette K. Nousak, Ph.D., CCC-A

Abstract:

Introduction

Service members who sustain TBI secondary to concussive events such as bomb/IED blasts or other blunt force to the heard, and have co-morbid emotional/mental trauma such as moral injury or PTSD present with

complaints of difficulty hearing despite their having normal pure-tone thresholds. Audiological assessment by the standard test battery often indicates essentially normal peripheral auditory function. Additional casehistory information and inclusion of Speech-in-Noise work-recognition tasks and/or central auditory processing screening can reveal deficits of hearing ability that may be addressed by aural rehabilitative methods currently available to the audiologist. These techniques include (i) counseling, (ii) auditory training and (iii) use of technologies such as hearing aids and assistive listening devices/accessories.

Methodology

50 Active Duty Service Members with TBI/PH disorders who present with borderline-normal or better hearing sensitivity in both ear and who (i) have no hearing complaints OR (ii) present with complaints of difficulty hearing will be included in the study

Results

25/50 subjects gave completed data and an additional 15 subjects gave partial data as indicated in the study. Among some of the findings were: Post deployment pure-tone findings indicated significant changes in hearing sensitivity from pre-deployment results; SMs with decreased hearing sensitivity due to TBI showed essentially flat configuration of hearing responses across the frequency range; and 17 subjects were successfully fitted with RIC hearing aids.

Learning Objectives

Discuss what testing material was used for the study and why it was included

Discuss what outcomes measures were used in the study

Discuss practical applications of the data and any follow up measures to be used

Short Biographies:

Jo Manette K. Nousak Ph.D. is an audiologist with the National Intrepid Center of Excellence, Walter Reed national Military Medical Center in Maryland.

Title: The effect of varying amounts of nonlinear frequency compression on amplified sound quality

Presenters: Keri Light

Abstract:

Introduction

Military service men and women often acquire hearing loss that is greatest in the high frequencies. For these individuals, high frequency amplification often fails to provide adequate audibility. Whether this information enhances intelligibility depends upon the magnitude of hearing loss and assumptions about effectiveness of audibility with increasing hearing loss. Frequency lowering technologies allow individuals with severe to profound high-frequency hearing losses to access speech cues by shifting them to lower frequencies where sounds can be made audible. Non-linear frequency compression is a frequency lowering strategy that compresses high frequencies above a cut-off frequency and shifts them to a lower frequency range. Currently there is a lack of consensus on effectiveness of these strategies. The purpose of this study is to

evaluate whether patient prefer non-linear frequency compression, and, if it is preferred, what strength do they prefer.

Methods

A total of 20 subjects with bilateral severe to profound high frequency hearing loss made sound quality comparisons of hearing aid processed speech recordings. Each patient was fit with BTE hearing aids programmed to have 5 manual memories with different frequency compression settings. By varying the memory program of the hearing aids and in effect changing the frequency compression of the participant's hearing aids, each participant made overall sound quality preference judgements on sentences from the Connected speech Test (CST) in quiet and in noise using the paired comparison technique. Speech intelligibility was predicted using the SII; loudness was predicted using the loudness model (Moore and Glasberg, 2004). A repeated measures analysis of variance design was used to anlyze mean SII and loudness values for statistically significant differences.

Results

Current data analysis for the participants completed so far, show that 3 out of 4 participants in the quiet settings expressed a preference for no frequency compression while the other participant expressed a preference for the compression at the default manufacturer recommended setting. In noise, data analysis revealed that 4 out of 4 expressed a preference for no frequency compression.

Learning Objectives:

Discuss types of frequency lowering strategies

Discuss methods used to evaluate patient preferences

Discuss practical applications of the information obtained

Short Biographies:

Keri Light is an audiology student at East Tennessee State University

Title: A benign Paroxysmal Positional Vertigo Specialty Clinic: a model for VA Health Care Presenters: Laura Williams; Faith W. Akin, Ph.D.; Stephanie Byrd, Au.D.; Courtney D. Hall, Ph.D.

Abstract:

Introduction

Benign Paroxysmal Positional Vertigo (BPPV) is the most common cause of dizziness related to vestibular dysfunction, and the use of canalith repositioning therapy (CRT) is the standard of care of treatment of BPPV. Although CRT is quick, safe, and effective, many patient with BPPV do not have access to this treatment. In the past 12 years, Veterans have been treated at the Mountain Home VA using a protocol which included a 2 week follow up visit to determine the effectiveness of CRT. Recently, the audiology service established a BPPV clinic to triage Veterans prior to undergoing a full vestibular test battery. The purpose of his study was to determine the following: (1) the characteristic of Veterans diagnosed with BPPV, (2) the efficacy and

recurrence rate, and (3) the incidence of BPPV and the access to care for Veterans with motion-provoked dizziness as seen through the triage unit in Audiology.

# Methodology

A retrospective chart review was performed on Veterans with a diagnosis code of BPPV and/or Veterans enrolled in the BPPV specialty clinic. Descriptive statistics were used to analyze results.

#### Results

The characteristics of Veterans with BPPV included several things, some of which are a mean age of 67, predominately male, history of head trauma, and primary symptom of motion provoked vertigo. The Dix-Hallpike and roll tests revealed a 79% treatment efficacy rate, with a mean number of treatments being 1.5. the recurrence rate of BPPV was 21% with the triage clinic able to identify 39%.

# Learning Objectives:

Discuss the testing used and the time needed per patient for initial testing
Discuss the various indicators needed to identify patients for the BPPV clinic
Discuss the results and the practical applications to VA audiology clinics
Short Biographies:

Laura Williams is an audiology student at East Tennessee Sate University; Faith Akin Ph.D., Stephanie Byrd Au.D. and Courtney Hall, Ph.D. are audiologists at Mountain Home VAMC.

Title: Progressive Tinnitus Management with Implementation of Tele-health Services Presenters: Jared Browning, Au.D.; Justin Howell Au.D.

# Abstract:

#### Introduction

The Salt Lake City VA audiology clinic is currently the only VA location within this geographical region which offers any form of tinnitus therapy/training above and beyond hearing aids. Tinnitus is one of eh largest disabilities within the VA. Therefore we saw the importance for implementing a tinnitus treatment program locally and for Veterans living in rural areas through Tele-health.

#### Methodology

Results

The Salt Lake City VA Audiology clinic implemented a modified version of Dr James Henry's "Progressive Tinnitus management" program. We began the program in August of 2010 at a local level and one year later incorporated tele-health to six separate community Based outreach clinics (CBOCs). Each PTM group meets for one hour per week for five total weeks. Attendance has averaged between 3 to 9 veteran each month.

We have recorded treatment outcomes by having patients fill out a pre and post Tinnitus Reaction Questionnaire. Over the past two years we have seen consistent improvement in scores among those who attend at least 4 out of the 5 classes.

# Learning Objectives:

Discuss the modified PTM plan

Discuss the efficacy of tele-health and tinnitus treatments

Discuss the practical applications for VA clinics nationally.

Short Biographies:

Jared Browning, Au.D. is a clinical audiologist with the Salt Lake City VAMC. Justin Howell, Au.D. is a clinical audiologist with the Salt Lake City VAMC.

### Technical Reviews 15 minutes each

### MED-EL

### Abstract:

This session will provide an overview of the MED-EL Maestro cochlear implant system and Vibrant Soundbridge middle ear implant.

The presentation will include a discussion of the MED-EL CONCERT cochlear implant with FLEX electrode arrays, along with the design rationale behind these components. Currently available external processors to include wearing options will also be discussed. Outcomes and published performance data using the Maestro cochlear implant system will be reviewed.

Additionally, we will review Vibrant Soundbridge middle ear implant candidacy criteria and potential benefits. The internal and external components of the Vibrant Soundbridge device will be discussed including the new Amade sound processor.

Learner Outcome 1: Identify and describe current MED-EL cochlear implant technology and candidacy.

Learner Outcome 2: Identify the benefits of a MED-EL cochlear implant based upon current research.

Learner Outcome 3: Identify and describe current MED-EL Vibrant Soundbridge middle ear implant candidacy, technology and benefits.

### **Biography**

Leslie Tarbutton is a Senior Clinical Account Manager and Vibrant Soundbridge® Implantable Hearing System Liaison for MED-EL Corporation. Leslie is a graduate of the University of Georgia and received her Au.D. at the University of South Florida. She worked in the VA system and in a private audiology practice before joining MED-EL in 2008. Since joining MED-EL, Leslie has held various positions in the company and is currently a Senior Clinical Account Manager providing clinical support for both cochlear implants and the Vibrant Soundbridge® to several states in the southeast. She has routinely been invited to speak about implantable devices at the Florida Academy of Audiology (FLAA) and Florida Association of Speech Language Pathologists and Audiologists (FLASHA) meetings as well as various other state conferences in the southeast.

### **GN Resound**

### **Abstract**

This presentation is designed to instruct attendees' regarding ReSound's 2.4GHz wireless technology and all ReSound Alera portfolios offered on the Government Services contract. This includes instructions regarding ReSound's unique wireless hearing instrument and accessories as well as the features, advantages and benefits of Surround Sound by ReSound. This presentation will also instruct attendees on best practice strategies for recommending wireless accessories to the hearing impaired patient as a part of their total hearing solution.

### Learner outcomes

- Participants will be able to describe the benefits of each of the four component of Surround Sound by ReSound.
- Participants will be able to describe the most current form factor offerings on the portfolio
- Participants will be able to discuss the difference between the most current wireless systems and how those systems compare to ReSound's 2.4 GHz wireless technology.
- Participants will be able to describe the wireless accessories of ReSound Alera, their associated
  applications and the added benefit these accessories provide to the hearing impaired patient.
- Participants will be able to discuss programming and best practices of the Alera TS
- Participants will be able to describe the tinnitus technology and on-going tinnitus sound enrichment.
- Participants will be able to identify tinnitus fitting strategies for ReSound products using Aventa fitting software

### Biography

### Lisa M. MacKay, West Account Manager

Lisa MacKay received her MA in Audiology from Western Washington University and her AuD from Pennsylvania College of Optometry, Department of Audiology. Her previous experience includes Supervisor of the Hearing Aid Program at University of Washington Medical Center and Professional Trainer/Consumer Outreach Audiologist for GN ReSound. She also worked as a clinical audiologist for Sonus in Washington State. Lisa is a member of ASHA, and served as President of Washington Society of Audiology from 2004-2005.

### Debra Castor, Au.D., South Account Manager & Training and E-Learning

Debra Castor, AuD, is the Outside Account Manager for the South US Territory and is based in Greenville, SC. Debra holds a Bachelor's Degree and Master's Degree in Audiology from Northern Illinois University. She also earned her AuD in 2005 from the Arizona School of Health Sciences. Deb gained extensive experience in clinical Audiology and hearing instrument dispensing during her 10+ years clinical tenure. She has been

working in hearing device manufacturing for nearly 10 years as Training Manager/Director, e-Learning program development, student outreach and regional sales.

All instructors are full time employees of GN ReSound and/or GN Interton. As instructors for a manufacturer of hearing instruments, the presentation does not include information in additions to other academic and non-product information. Instructors do not receive any additional financial benefit or reward above and beyond their salary or contract agreement for presenting this seminar.

### Unitron

User preference and speech in noise benefit from SmartFocus technology

### Abstract:

This presentation covers research undertaken to establish the clinical efficacy of Unitron's SmartFocus<sup>™</sup> technology. Under SmartFocus control multiple adaptive features adjust synchronously rather than being allowed to freely vacillate independently of one another. This leads to better optimization of the hearing instruments and yields improved sound quality and speech clarity.

Study subjects who compared smartFocus enabled hearing instruments at the University of Iowa to the same instruments without it, preferred the enabled instruments 92% of the time. Speech intelligibility measures using the HINT and BKB-SIN tests were undertaken at the University of Rochester and Louisiana Tech. In this case both tests were modified such that speech was from the front of the listener and noise came from four separate speakers surrounding the listener. The results show significant improvements in speech perception in speech weighted noise and multitalker babble for smartFocus enabled devices. The improvement in speech perception in noise was found in both vented and open fittings on subjects who wore the same hearing aids with and without smartFocus. Those same subjects also reported significantly improved sound quality in noise with smartFocus enabled.

The presentation concludes with the benefits SpeechZone processing where binaural directional microphones work together with speech detectors in smartFocus to determine the direction of speech in noise and automatically narrow the adaptive directional beamformer when speech is in front of the listener. The hearing instrument classifier, smartFocus and wireless technology all work together to provide improved speech perception in noise.

### Learner Objectives:

- 1. Participants will learn the benefits of synergistic processing for adaptive hearing instrument features
- 2. Attendees will see how a 16% improvement in speech perception in noise was obtained under very difficult listening conditions.
- 3. Participants will learn how automatic features such wireless binaural transmission can be used in conjunction with smartFocus processing to provide further performance improvements.

### Biography

Donald Hayes, Ph.D. is Director of Audiology for Unitron and is responsible for the company's corporate audiology group. His group works closely with the organization's product management and research & development teams to provide a clinical perspective during the definition and validation of new products.

Dr. Hayes extensive career spans clinical practice, academia and the commercial marketplace. Prior to joining Unitron, he was Assistant Professor, Department of Communications Sciences and Disorders, University of Cincinnati, Lecturer, Faculty of Medicine, University of Toronto. He also served as an Audiologist Consultant with Sunnybrook Health Sciences Centre, Toronto, and for the Sioux Lookout Project with the Canadian Ministry of Health.

Dr. Hayes holds a Ph.D. in Audiology from the University of Cincinnati, a Master of Arts in Audiology from State University of New York (SUNY) at Buffalo, and a Bachelor of Arts in Communication Disorders and Sciences also from SUNY at Buffalo.

Extensively published, Dr. Hayes serves on the Advisory Boards of Advance for Audiologists and Audiology Online. Dr. Hayes's current research is focused on acoustics analysis of adaptive features in wearable digital hearing aids, and on effects of newly developed DSP algorithms in wearable digital hearing aids on hearing impaired listeners.

### Ototronix

The MAXUM Hearing Implant: A minimally invasive implant for the treatment of sensorineural hearing loss

### **Abstract**

MAXUM is a partially implantable prosthetic device that is an alternative to traditional hearing aids. Unlike hearing aids which use a speaker to amplify sound, MAXUM directly stimulates the cochlea by vibrating the ossicles using electromagnetic energy. This produces clearer, more powerful and more natural sounds than acoustic hearing aids for most users. The MAXUM System consists of a magnetic implant which is attached to the ossicles and an external sound processor called the IPC (integrated processor and coil) which is typically worn in the ear canal. The IPC processes and converts incoming sound into electromagnetic energy that is picked up by the magnetic implant. As the implant vibrates on the ossicular chain, it directly stimulates the cochlea.

MAXUM is FDA approved for patients with moderate to severe sensorineural hearing loss. The FDA clinical study compared the performance of MAXUM with patients' best fit hearing aids. MAXUM provided 7.0-7.9 dB additional functional gain in the Pure Tone Average (500, 100 & 2000 Hz), and 9.2-10.8 dB additional functional gain in the High Frequency Average (2000, 3000 and 4000 Hz). In addition, average improvements

in speech recognition of 5.3% at 20 weeks and 12.2% at one year were shown. Patients reported overwhelming preference for MAXUM over their hearing aids for sound quality, less occlusion, less feedback, and overall satisfaction.

The MAXUM implant procedure is minimally invasive and can be performed in about 30 minutes in a physician's procedure room or surgical center under local anesthetic.

### **Learning Outcomes:**

As a result of this activity, participants will be able to:

- 1. Understand the principles of operation for the MAXUM.
- 2. Recognize MAXUM candidacy criteria.
- 3. Understand the MAXUM surgical procedure.
- 4. Counsel potential candidates for MAXUM when appropriate.

### **Bio Sketches:**

Michael E. Glasscock, III, MD FACS. For most of his career, Dr. Glasscock was in private practice at the Otology Group in Nashville, TN, which he founded. While there, he was also a clinical professor in the Department of Otolaryngology and an Associate Professor in the Department of Neurosurgery at the Vanderbilt University Medical Center. He ran an Otology/Neurotology fellowship program from 1975 – 1997 training fifty otologists. His fellowship program and practice are now part of Vanderbilt. He founded the American Journal of Otology (now Otology/Neurotology) and the Ear Foundation (in Nashville, TN). He has published over 260 peer reviewed papers in the otolaryngology literature and was the editor for six editions of *Surgery of the Ear*. Dr. Glasscock is currently is an Adjunct Professor of Otolaryngology at Vanderbilt University Medical Center in Nashville, TN, practices at the Glasscock Hearing Implant Center in Houston, TX, and is a consultant to three medical device companies.

Anna McCraney, Au.D., ABA. Dr. McCraney obtained her Au.D. from Baylor College of Medicine, under the directorship of Dr. James Jerger. Through her work with the Veterans Administration, Texas Children's Hospital, otolaryngology private practice and industry, her clinical expertise offers both breadth and depth. For the last four years, she has been an Ototronix, LLC associate and has been instrumental in promoting the optimization of audiology in the US and abroad. She has worked closely with national health services, government entities, hospital systems and individual practices to promote and implement methods of improved hearing healthcare access the world over.

Dr. McCraney also works in collaboration with Dr. Michael E. Glasscock as the Director of Audiology at the Glasscock Hearing Implant Center in Houston, TX. The Glasscock Hearing Implant Center is a specialty clinic in the area of middle ear implants.

### Starkey

### Abstract:

Given the pace of technology development in modern hearing aids, it is imperative hearing care professional understand the performance of today's most advanced features and their clinical value. This course reviewed available products and differences in technology levels. Understanding differences between product families and technologies is important to meeting patient needs. This course reviewed how to match technology to the patient's lifestyle and audiometric needs.

### Learning Objectives:

Attendees will be able to list three current products available.

Attendees will be able to identify two differences between technology levels.

Attendees will be able to select appropriate products based on a patient's needs.

### Bio:

Julie Dunphy, Au.D.

Julie joined Starkey Government Services in March of 2006. She has served many different roles in the group and is currently managing the education and technical support aspects of government services. Prior to working at Starkey, she worked seven years in the VA hospital as an audiologist focusing on hearing aid fittings as well as balance disorders. She received her Masters degree from Miami University of Ohio and her Au.D. from the University of Florida.

### **NCRAR**

### Abstract:

The National Center for Rehabilitative Auditory Research (NCRAR) located at the Portland VA Medical Center (PVAMC) was established in 1997, and is currently one of fourteen Centers of Excellence funded by the VA Rehabilitation Research and Development (RR&D) Service. The Center conducts research, trains new scientists, and disseminates information to clinicians who assess and treat Veterans with hearing disabilities. In addition, the Center works to educate and inform the public about conservation, how to prevent further hearing loss, and effectively cope with tinnitus.

### Learner outcomes:

- To explain the history and guiding principles of NCRAR
- To identify current areas of research
- To propose ideas for research that would benefit VA clinicians

### Biographies:

Melissa Frederick received her Au.D. from the University of Iowa in 2008. She completed an externship at the University of Iowa Hospitals and Clinics, where she worked in the diagnostics, hearing aid, and cochlear implant departments. She was also a trainee in the Leadership Education in Neurodevelopmental Disabilities (LEND) program, and spent time working in pediatric audiology at the Center for Disabilities and Development in Iowa City, IA. She has since worked as a research audiologist at the National Center for Rehabilitative Auditory Research (NCRAR) in Portland, OR, where she has taken part in studies that have

examined the perception of vowel sounds in noise, auditory training in hearing impaired adults, and auditory rehabilitation in a blast-exposed population. Her interests include rehabilitative audiology, specifically counseling and hearing aids.

Tina Penman is an audiologist at the National Center for Rehabilitative Auditory Research at the Portland VA Medical Center and she currently serves as treasurer for the Association of VA Audiologists. She received a BS in behavioral neuroscience (2006) and clinical doctorate in audiology (2010) from Northeastern University. Current projects with Dr. Curtis Billings include the investigation of the relationship between auditory evoked potentials and behavioral measures. Other research interests include the effects of military, recreational, and occupational noise exposure on the auditory system, specifically skydiving noise exposure. Her long-term goal as an audiologist is to better serve the soldier and veteran populations through the application of research findings to clinical practices, the real world, and combat-related settings.

### Siemens

Title:

Learning plus acclimatization: Trainable hearing instruments just got smarter

Presenter: Thomas A Powers, Ph.D.

### Abstract

Fine-tuning is necessary in hearing instrument fitting to accommodate individual preferences. With trainable instruments, this can be accomplished through volume control changes by the wearer. In conjunction, acclimatization allows the wearer to adapt to gain while the instrument slowly and imperceptibly increases gain to achieve optimum audibility for speech intelligibility over a specified time period. This course will review related clinical evidence and demonstrate how these tools can increase efficiency and effectiveness in clinical practice.

### Learner outcome:

Upon completion of this session, the participant will be able to utilize the learning and acclimatization features in order to help their patients fine-tune to their individual preferences, increase patient satisfaction and refine the efficiency of the fitting process.

### Bio information on presenter

Thomas A. Powers, Ph.D. is currently Vice-President, Product Management & Compliance for Siemens Hearing Instruments, Inc. Dr. Powers received his B.S. from the State University of New York at Geneseo, and his M.A. and Ph.D. in Audiology from Ohio University. He was a partner in an Audiology private practice, and has over 30 years of experience in the hearing health care industry. He is a fellow of the American Academy of Audiology (AAA), a member of the Academy of Dispensing Audiologists (ADA), a member of the American Speech, Language and Hearing Association (ASHA), as well as a member and served as President of the American Auditory Society (AAS) for 2004 - 2006. Dr. Powers has lectured

extensively at state, national and international meetings His primary areas of interest include hearing instrument technology, outcome measures and directional microphone technology.

### Sound Pillow

### **Abstract**

R. Scott Armbruster is the CEO and designer of the Sound Pillow® and inventor of the Sound Pillow® Sleep System.

Scott has been developing the Sound Pillow® since 1996 with the goal of finding a night time "solution" for his own Tinnitus. Scott's discussion will include: Sleeping with Tinnitus, a personal look at his own Tinnitus experiences and the impacts of the Sound Pillow® and Sound Pillow® Sleep System for those suffering with Tinnitus.

### **Learner Outcomes**

- Speaker Design as it applies to Tinnitus
- Content overview included/chosen to be part of the Sleep System
- How the content is developed with special attention to the of Tinnitus sufferers

### Bio

R. Scott Armbruster is the CEO and designer of the Sound Pillow® and inventor of the Sound Pillow® Sleep System.

- 1) **Brown Institute:** Radio/Television Broadcasting 1982 1983
- 2) Mankato State University (now University of Minnesota at Mankato): Business Administration degree with an emphasis in Marketing
- 3) Mankato State University (now University of Minnesota at Mankato): Speech Communications with an emphasis in Intra & Inter Personal Communications

	•	

### SOLVING THE PUZZLE

JOINING AUDIOLOGY AND INTERDISCIPLINARY HEALTHCARE TEAMS

OCCUPATIONAL HEALTH

OPHTHAL MOLOGY

POLY. TRAUMA

SPEECH PATH OLOGY AUDIOLOGY

NEU-ROLOGY

PHYSICAL THERAPY OTDLARYN GOLOGY

Joint Defense Veterans Audiology Conference

February 25/27, 2013 Gaylord Opryland Resort Nashville, TN

# 2013 JDVAC Conference

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Save the Date!	Page 27

### Special events:

Student experience Student Concha Bowl Reception 5th Annual Concha Bowl MAA Banquet We would like to send a special Thank You to our
Exhibitors!

Please see handout with exhibitor information and a map of the exhibitor hall.

Please be sure to visit the our exhibitors in the Exhibit Hall! Our exhibitors are key to the success of our program, so be sure to stop by their booths and theanjk them for their attendance!

# Continuing Education Information

ASHA CATOR CONTROL OF THE CONTROL OF

Unidoo Hearing is approved by

The Continuent Education Board
of the American Expendituring
Hearing Amortisms (ASAM) is
provide continuent education

The American is a spead foreign of

See course information for remitter of ASSA (CII), instructional lineal and contract areas. ASSA C.E. Provider approval does not imply proceedures,

Ivees
This course is offered for 1.95 ASHA CEUs
(Intermediate level, Professional area).

# Welcome from the President

### JDVAC Attendees:

fully embraced by our members, and JDVAC is now recognized to be one of the premier hearing enhancing the cooperation and collaboration between DOD and VA audiologists. The idea was Welcome to Nashville and the fifth annual Joint Defense Veterans Audiology Conference. This annual meeting of our two organizations began as part of an effort aimed at expanding and health care educational gatherings held each year. Since the conference's inception, our planners have endeavored to create an experience that will better equip us to provide the best preventive, diagnostic and rehabilitative care possible, and also to remind us of who it is that we serve. This year we are proud to continue that tradition

nterdisciplinary healthcare teams. We are excited about this year's agenda and we are excited During this year's conference we take the spirit of cooperation and collaboration that is the specialized work with other medical professionals and fulfill our roles as members of to have you in attendance. We are also very appreciative of your commitment to our cornerstone of JDVAC, and we build upon it by examining how we can engage in organizations, to our profession and to the heroes we serve.



Amy Blank, LTC, USA President, MAA

> Scott C. Forbes, Au.D. President, AVAA



A very special THANK YOU to the following people for their assistance in making the 2013 JDVAC happen!

Presenter Committee: Jennifer Nalley, chair: Mark Kielecki, co-chair; LTC Amy Blank, Scott Forbes, Executive Planning Committee: Jennifer Nalley and LTC Amy Blank Education Committee Chair: Sean McClenne

Poster Session: Nanette Lee, chair; Karen Suguira, co-chair Denise Goforth, Sean McClenney, Christine Ulinsk

Printed Program and Registration: Danielle DeBiase and Rose White, co-chairs Exhibitors: LTC Amy Blank, chair

Continuing Education: Chris Galizio, chair

Concha Bowl: Christine Ulinski, chair; Kathleen Conley, Hope Gillison, Melissa Johnston, MAJ Melissa Leccese, MAJ Andy Merkley, Ashley Myeress, Angela Ponthier, Karen K. Stewart

Student Experience: Hope Gillison, chair

We would also like to thank the volunteers assisting with registration and the 25 student volunteers that will be assisting with the convention!

## AVAA 2012-2013 Officers

MAA 2012-2013 Officers

scott C. Forbes, Au.D.

sarah Draplin, Au.D. President-Elect

Jennifer Nalley, Au.D. Past-President

Jamie Sklarski, Au.D. Secretary

Freasurer

Sean McClenney, Au.D. Member at Large

Rob Pluta, USN

fhe mission of the Military Audiology perational readiness and quality-offe to teh Fighting Force and eligible eneficiaries by providing cost-effec-Association (MAA) is to ensure

we hearing health care through state

strategically place military audiologists to suppor the ighting Force for success on teh modern battlefield. urveillance, education, and research. We will f-the-art audiological services, ncluding prevention, medical

xperts and providers of hearing health care. We will chieve pre-eminence in preventing disease-noneducation and research to enhance operational dilitary audiologists are recognized as primary reventive medicine activities by promoting attle-injury. We will emerge as leaders in

eadiness

MAJ Brandon Tourtillott, USAF Vonvoting Council Members: MAJ Kwame Curtis, USAF) 3PT Marvin Jennings, USA Maj Nicole Cioni, USAF T Amy McArthur, USN Communications/Web: TC Amy Blank, USA **Executive Secretary** Marge Jyikka, USN Member at Large Vice President Past-President ecretary Tina Penman, Au.D.

Audiologists (AVAA) is an The Association of VA

established in 2001 to address the Affairs (VA). The goal of the AVAA is to achieve and raining, and research by individual audiologists and working ties with other related governmental and/or ind national levels and to establish professional and employee organization that was Administration of teh U.S. Department of Veterans concerns of audiologists within within the VA and outside the VA at regional, state he programs in which they are housed. It is also the purpose of the AVAA to promote Audiology maintain the highest quality of patient care, professional needs and the Veterans Health professional groups.

### Schedule-at-a-Glance

Sunday, February 24	
5:00 pm - 8:00 pm	Registration Open
Monday February 25	2
7:00 am - 8:00 am	Registration Open
8:00 am - 8:30 am	Announcements
8:30 am - 9:30 am	Featured Speaker
9:30 am - 10:00 am	Break
10:00 am - 12 pm	Featured Speaker
12:00 pm - 1:30 pm	Lunch/Exhibit Hall
1:30 pm - 4:00/5:00 pm	Service Breakout
4:00 pm - 5:00 pm	Student Experience
5:00 pm - 6:00 pm	Student/Concha Bowl
Reception	
6:00 pm - 8:00 pm	Concha Bowl
Tuesday February 26	
8:00 am - 8:30 am	Announcements
8:30 am - 9:30 am	Featured Speaker
9:30 am - 10:00 am	Break/Poster Sessions/
	Exhibit Hall
10:00 am - 12 pm	Featured Speaker
12:00 pm - 1:00 pm	Lunch/Poster Sessions/
	Exhibit Hall
1:00 pm - 3:00 pm	Concurrent Sessions
3:00 pm - 3:30 pm	Break
3:30 pm - 6:00 pm	Concurrent Sessions
6:00 pm - 8:00 pm	MAA Banquet
Wednesday February 27	
8:00 am - 8:30 am	Announcements
8:30 am - 9:30 am	Featured Speaker
9:30 am - 10:00 am	Break/Exhibit Hall
10:00 am - 11 am	Featured Speaker
11:00 am - 12:00 pm	Lunch/Exhibit Hall
12:00 pm - 1:30 pm	Concurrent Sessions
1:30 pm - 2:00 pm	Break
2:00 pm - 5:00 pm	Concurrent Sessions

### Welcome from the local military installment



# Welcome from the Tennessee Valley Healthcare System



ville. I speak for the entire staff in the Audiology and Speech Pathology Service at the VA Tennessee Valley

Greetings, fellow audiologists, and welcome to Nash

On behalf of the staff and leadership at the Department of Veterans Affairs Tennessee Valley Healthcare System, I extend to each of you a warm welcome to Nashville for the annual Joint Defense Veterans Audiology Conference. We are delighted you have selected Nashville as the site for your meeting and hope your stay is both enjoyable and productive.

I hold in high regard the contributions made by our audiologists in the care of our soldiers and Veterans who have sustained hearing and balance disorders during the time of their military duty to our country.

The significance of these injuries is made more apparent because of both their prevalence and the impact they have upon the well-being of these patients. I applaud the progress you have achieved in the restoration of these individuals to their maximum potential.

Again, please accept our gratitude for the work that you do, best wishes for your conference, and have a wonderful stay in Nashville.

incerely,

Juan A. Morales, RN, MSN Health System Director



Healthcare System when I say that we are pleased to have you in Nashville this week for the annual joint Defense Veterans Audiology Conference.

I recall clearly, some time ago, when the idea first came before the VA Audiology and Speech Pathology National Field Advisory Council that consideration should be given to the formation of a national association of VA audiologists, and later that we should meet with DoD audiologists on a regular basis. Few at that time could have envisioned what we are going to enjoy this week. I believe that this conference is the best national meeting for audiologists within the VA and the DoD when consideration is given to the breadth and quality of content, and the direct applica-

Please enjoy the ambience of Opryland, but I would also encourage you, while in Nashville, to make at least one trip down to Lower Broad to visit the nightlife and honkytonks there, and maybe stop in at Tootsie's, or Robert's Western World.

ion to the work we do each day.

Work hard and play hard while you are here, and best wishes for a great meeting.

Regards,

Gene Bratt, Chief
Audiology and Speech Pathology Service
VA Tennessee Valley Healthcare System







## Highlight of local Research





Leutenant General Horoho deployed with I Corps, as ieutenant General Horoho has earned her Bachelor icience degree as a Clinical Trauma Nurse Specialist DeWitt Flealth Care Network, Port Belvoir, Virginia, on 05 December 2011 and was sworn in as the 43rd and Deputy Commander for Nursing, Walter Reed Army Medical Center and North Atlantic Regional of Science in Nursing degree as well as a Master of ind a second Master of Science degree in National Resource Strategy. Military assignments (among Commander for Nursing and Commander of the Management Policy in the Office of the Assistant Medical Command, Washington, D.C. In 2011, many) include Assistant Deputy for Healthcare secretary of the Army (Manpower and Reserve Army Surgeon General on 07 December 2011. Affairs), Pentagon, Washington, D.C.; Deputy International Security Assistance Force Joint the Special Assistant to the Commander, Command, Kabul Afghanistan.

spectrum to receive national recognition as a "Nurse December 3, 2001, by Time Life Publications for her actions at the Pentagon on September 11, 2001. On selected by the American Red Cross and Nursing eptember 14, 2002, she was among 15 nurses ieutenant General Horoho was honored on

ervice Medal (6 OLC), Army Commendation Medal 3 OLC), Army Achievement Medal (1 OLC), Armed ieutenant General Horoho's awards and decorations 'orces Expeditionary Medal, Afghanistan Campaign include the Distinguished Service Medal, Legion of Merit (2 OLC), the Bronze Star Medal, Meritorious Aedal and various service and unit awards.

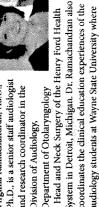
Charlie Plumb, CAPT (ret.), USN aptain Charlie Plumb graduated Annapolis and went on to fly the -4 Phantom jet on 74 successful combat missions over Vietnam. rom the Naval Academy at

ommunications, and served for two of those years as lays before he was to return home, Plumb was shot oot x 8 foot cell. He spent the next 2,103 days as a own, captured, tortured, and imprisoned in an 8 Juring his nearly six years of captivity, Charlie lumb distinguished himself among his fellow risoner Of War in communist war prisons. prisoners as a professional in underground On his 75th mission, with only five he Chaplain in his camp.

Captain Plumb's Military honors include two Purple learts, the Legion of Merit, the Silver Star, the Sronze Star and the P.O.W. Medal.

### irginia Ramachandran, Au.D., Ph.D.

2h.D., is a senior staff audiologist Arginia Ramachandran, Au.D., nd research coordinator in the Division of Audiology,

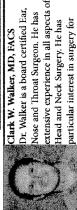


he American Academy of Audiology's Education and at-large for the Executive Board of the Accreditation issociate consulting editor for Plural Publishing Inc. Academy of Audiology and serves as a member or Occuments Committee for AAA and is a member Ramachandran is the Subcommittee Chair of the Commission for Audiology Education. She is an Professor. She is past-president of the Michigan rofessional Education section of the Strategic Coding and Reimbursement Committees. Dr. he is an Adjunct Assistant

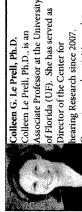
nd is co-author of the Core Clinical Concepts in

Audiology Basic Audiometry Learning Manual.

### Featured Speakers



Ear, Nose & Throat since January 2005. From 1998 to urgery. Dr. Walker received his medical and surgical Walker has been practicing in Colorado at Integrated 2004 Dr. Walker served as a Staff Otolaryngologist at Director for Surgical Services during Operation Iraqi the Naval Hospital, Great Lakes, Illinois. He was the restoration of hearing, thyroid and chools. He continues to serve as a Commander in raining through the military by attending medical Department Head and Chairman of the Executive Committee of the Medical Staff. He also served as chool in Bethesda, Maryland at the Uniformed Assistant Professor at two Chicago area medical eck surgery, sinus surgery and facial cosmetic ervices University of the Health Sciences. Dr. reedom. He held appointments as a Clinical the United States Naval Reserve.



doprotective agents. These on-going efforts have led herapeutics. Dr. Le Prell has been invited to present ters to several hearing conservation texts that will be ditor on "Noise-induced hearing loss: scientific adner research findings nationally and internationally, identify mechanisms of cell death after insult to the Current research activities seek to vances," (Springer, 2011), and has contributed chap and has lectured on the challenges of translational ARHL) and noise-accelerated ARHL using two ootential prevention of age-related hearing loss esearch in Otolaryngology. She served as lead o two issued patents (owned by University of Michigan). Funding from the Department of inner ear; data are used to identify potential Defense supports current research assessing published in the next year.

### Mark D. Packer, Col (s) USAE, MD

career began with acceptance to the congressionally mandated Hearing Center of Excellence. His military Neurotologist and Director of the Jniformed Services University in Dr. Packer, is an Air Force



Neck surgery upon finishing his residency training in education and training, and the medical director for environments. Consulting with Bose corporation he ask forces in this capacity he experienced first-hand educational training Dr. Packer had the opportunity he WMD rapid response team. Working with joint 991. He completed a general surgery internship at Wright State University, Dayton, Ohio, in 1996, and graduated from fellowship training in neurotology fit and implemented the first deployed active noise Education Consortium in 2002. Most recently he conservation and communication in austere noise was board certified in Otolaryngology Head and squadron 1996-1998 he served as the emergency University in 2008. Intermixed throughout his o serve in the operational Air Force. As a flight surgeon attached to the 16th Special operations esponse team leader, the medical director of he San Antonio Uniformed Services Health and cranial base surgery at The Ohio State he functional paradox between hearing eduction headsets for Air Force pilots.





attendance sheet. At the conclusion of each session, a CEU code will be given. Please Please turn off or silence all cell phones. Remember to sign in each day on the record this code on your CEU sheet.

### **loint Sessions**

## Monday-February 25, 2013

Fitle: Announcements

total team effort for success. This team effort requires agencies, from the point of injury on the battlefield to these visits? How do we positively impact the "99%"? rehabilitation and possible life-long services through face. Over 99% of the rest of a patient's life happens systems to use technology and resources in relevant the Veteran's Administration. On average, only 100 minutes of primary healthcare is provided face-to-Patient health needs to be connected, collaborative Soldier medicine today, more than ever, requires a Presenters: Lieutenant General Patricia Horoho between these visits. What is happening between Our systems needs to transition from healthcare delivery to more of a focus on health - the other "99%". This paradigm shift requires healthcare and engaging ways to positively impact health. collaboration and integration between many Fitle: Practicing in the White Space and patient-centered.

### Break 9:30-10:00

Title: "I'm no Hero"

Of War in communist war prisons. During his nearly before he was to return home, Plumb was shot down, in underground communications, and served for two presentation, Captain Charlie Plumb draws parallels between his P.O.W. experience and the challenges of captured, tortured, and imprisoned in an 8 foot x 8 Phantom jet on 74 successful combat missions over himself among his fellow prisoners as a professional foot cell. He spent the next 2,103 days as a Prisoner everyday life with insights on how to cope with the Vietnam. On his 75th mission, with only five days six years of captivity, Charlie Plumb distinguished of those years as the Chaplain in his camp. In this Captain Charlie Plumb graduated from the Naval Academy at Annapolis and went on to fly the F-4 Presenters: Charlie Plumb, CAPT (ret.), USN difficulties as well as the opportunities in life.

Lunch/Exhibit Hall 12:00-1:30



**Army Breakout** Nitle: Consultant Update Fime: 1:30-1:50

Presenters: LTC(P) Marjorie A. Grantham, Ph.D. Fitle: PHC Update Fime: 1:50-2:10

Presenters: COL Vickie Tuten, Au.D.

Presenters: LTC Kristen Casto, Au.D., Ph.D., **litle: Balanced Score Card Update** Fime: 2:10-2:30

UTC(P) Marjorie A. Grantham, Ph.D. Time: 2:30-4:00

ZDAX

LTC(P) Marjorie A. Grantham, Ph.D., LTC Kristen Casto, Au.D., Ph.D., Maj Dan Ohama Presenters: COL Vickie Tuten, Au.D., Fitle: Our Culture of Trust

program with an industrial focus to one that provides audiologists, will provide a detailed layout of the new program managers the "where, and how" to put these hearing readiness, hearing conservation, operational, across the continuum from home station to a theatre will be presented. This presentation will also provide requirements for tracking productivity. Templates available to program managers and commanders and clinical hearing services to Service Members The Army Hearing Program has evolved from a and both strategic and installation-level metrics of operations. This presentation, by a panel of processes in place at their installations.





### Navy Breakout

### Navy Breakout Day Agenda TBA



### Air Force

Fime: 1:00-1:35 Fitte: AF Audiology/SLP Consultant Address Presenters: LTC Beth Harrison

Break 1:35-1:50

Time: 1:50-2:10 Title: BSC Manning & Force Structure Presenters: Maj David Eisenach

Time: 2:10-2:30 Title: AFPC; Career Development Presenters: Maj Alicia Nelson Time: 2:30-2:50

Title: Hearing Center of Excelence
Presenters: Maj Jeffrey Wisneski, Au.D.
An in-depth analysis by the Army, Air Force and
Navy, finds the ROES to be an effective and efficient
system. The ROES allows the DOD to obtain hearing
aids, assistive auditory devices, cochlear implants,
batteries, and accessories at significantly reduced
costs, and dramatically reduces the waiting time for
our active duty service members. In addition, the
ROES is a centralized repository of hearing
heatthcare information that will greatly benefit our
service members by providing a seamless transition
from active duty to the veteran's ranks.

OZDAX







Fime: 2:50-3:20

Air Force

Title: DOEHRS - HC Update Presenters: Elizabeth McKenna, Capt, USAB, BSC, CCC-A, F-AAA

Update intended for Air Force audiologists, to include discussion of current projects within USAF School of Aerospace Medicine, potential upcoming changes to the current AFOSH 48-20 document, status of DOEHRS-HC/DR applications and funding priorities.

Fime: 3:20-3:40

Title: Research and Audiologic Support in a Deployed Environment Presenters: Brandon M. Tourtillot, Ph.D. Maj, USAE, BSC This presentation will discuss some challenges and opportunities of conducting research in theater while also discussing the need and role of Audiologic Support in-Theater.

lime: 3:40-4:00

Title: Retro Review comparing KC-10 & C-5 Crew Hearing Loss Presenters: Courtney Harper, Capt, USAF, BSC, A retrospective review was done comparing KC-10 crew hearing loss and C-5 crew hearing loss to determine if there was a difference in hearing loss between the groups. The KC-10 crew is not required to wear hearing protection except for the boom operator when he/she is in the boom. The KC-10 pilots and flight engineers all wear a headset on one ear. The C-5 crew members all wear a headset on hearing protection devices. We analyzed the data from the past 10 years to determine if there was an asymmetrical shift in hearing seen in the KC-10 crew.





### **AVAA Breakout**

Time: 1:30-2:15 Title: National Update Presenters: Lucille Beck, Ph.D.

This presentation will cover current challenges to VA audiologists and anticipated changes in policy including new VAi2, data from hearing aid outcome measure (VA-wide) and its impact on best practice

measure (VA-wide) and its impact on best practice with hearing, strategic initiatives which may impact on clinical care and audiology services, telehealth initiatives and their impact on delivery of audiological services in the VA, and educational opportunities that are available for VA audiologists.

Break 2:45-3:00

Title: AVAA Business MTG/Awards

Time: 2:15-2:45

Presenters: Scott Forbes, Au.D.

ZOZDAX

Time: 3:00-4:00 Title: Operation S.A.V.E. and Audiology

Operation S.A. V.E. is a Veteran specific beginner level training program designed to give non-clinical staff and community members a way to remember the steps in the process of identifying a potentially suicidal Veteran, confirming the Veteran's status, reassuring the Veteran that they are being heard and leading the Veteran to help.

Time: 4:00-4:30 Title: VA Field Advisory Council Update Presenters: Rachel McArdle, Ph.D.

Time: 4:30-5:00 Title: C&P Q&A Presenters: Kyle Dennis, Ph.D. Time: 4:00-5:00

Title: Student Experience
This is a time for the students to learn from Military
This 1114

This is a time for the students to learn from Military and VA personnel about the application process of occoming an employee. Students will have the apportunity to ask the presenters questions.

### oint Sessions

Time: 5:00-6:00

to obtain information on the application process for a current Audiologists that are working in the field and This is a great time for students to network with Title: Student/Concha Bowl Reception career with the DoD/VA.

Concha Bowl 6:00-8:00

# **Tuesday-February 26, 2013**

Fime: 8:00

Title: Announcements

**Fitle:** Documentation

Presenters: Virginia Ramachandran, Au.D., Ph.D. With the advent of the electronic medical record,

methods of communicating audiologic information have evolved. In addition, criteria for

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documentation continue to change over time. This distinction between reporting and documentation. The latest evidence to support effective communication among healthcare providers will be discussed presentation will include the rationale for and

Break/Grand Opening of Poster Session/Exhibit Hall 9:30 - 10:00

### **Fuesday Poster Sessions:**

Presenter: LCDR Paula Johnston, Au.D., CCC-A Title: Reducing Noise Levels in the NICU CoInvestigator: LT Brenda Sharpe Title: Definition of a New Auditory Fitness for Duty Trigger-Referral Protocol

Presenter: CDR Antony Joseph, MSC, USN, Au.D.,

Presenter: CDR Antony Joseph, MSC, USN, Au.D., Protection Devices by use of Noise Exposure Data Title: Selection of an Inventory of Hearing

Title: Vasovagal Syncope During Audiological

Presenter: Erin Coomes, Au.D., CCC-A

### oint Sessions

## **Tuesday Poster Sessions Cont:**

Preferences of Sound Quality Among the Current Presenters: Christine Brown, Au.D. Student, Earl Fitle: Determining Hearing Impaired Adults' Johnson, Au.D., Ph.D. Prescriptive Methods.

Management of Multiply Involved TBI Patient litle: Case Study: Audiological and Vestibular Presenters: Jillian Earnes, Au.D., Heather E. Rudisill, Au.D.

Fitle: A Joint Mission: Captain James a Lovell Federal Health Care Center

Conway, M.S., Jillian Earnest, Au.D., Lori Howe, Presenters: Heather E. Rudisill, Au.D., Barbara Foole-Trexler, M.S., Darrin Worthington, Au.D. Au.D., David Jagodzinski, Au.D., Dominique Matthews, Au.D., Amy Rymer, Au.D., Janet

Fitle: A Comparison of Audible RMS Frequency Prescriptive Methods for Adult and Pediatric Bandwidth from NAL-NL2 and DSLm[i/o] Hearing Aid Fitting

Presenters: Jennifer Trammell, Au.D. Student, Earl Johnson, Au.D., Ph.D.

Member/Veteran with mTBI and Co-morbid PH Title: Audiological Management of the Service Disorders

Presenters: Jo Manette K. Nousak, Ph.D., CCC-A

litle: The Effect of Varying Amounts of Nonlinear Frequency Compression on Amplified Sound **Ouality** 

Presenters: Keri Light, Au.D. Student

Presenters: Laura Williams, Au.D. Student, Faith W. Akin, Ph.D., Stephanie Byrd, Au.D., Courtney D. litte: A Benign Paroxysmal Positional Vertigo Specialty Clinic: A Model for VA Health Care

preferred gain adjustments. Considering prescriptive

recommendations in combination with patient

outcome measures can likely improve clinical

decision making via the complement of both

objective and subjective data.

Prseenters: Jared Browning, Au.D., Justin Howell, **Fitle: Progressive Tinnitus Management with** implementation of Tele-Health Services

### **Concurrent Sessions**

Otoscopic examination by the Audiologist is critical in ossicles and other landmarks visible in the middle ear. pathologic findings such as perforations, retractions, cholesteatoma, middle ear effusions, post-surgical Audiologists must be confident in their ability to recognize the normal tympanic membrane(TM), How the TM and middle ear stay healthy and appearance of grafts and prostheses, surgical the audiometric evaluation of every patient. Equally important is the ability to identify Presenters: Clark W. Walker, MD, FACS complications such as graft extrusion, etc. protected are important considerations

Lunch/Poster Session/Exhibit Hall 12:00-1:00

**Fopic: Amplification** 

litle: The Clear Clinical Relevance of Prescriptions ed for measures of speech intelligibility and loudness models. Data from adult participants will be report conductive); more importantly, such prescriptions relevance with regards to comparisons of common This presentation will report on matters of clinical accommodate any configuration of hearing loss as as well as sound quality preference judgments and for Hearing Aids and Various Hearing Losses well as various types (sensorineural, mixed, or generic prescriptive methods for hearing aids. have application to all hearing aid brands and Generic prescriptions have been designed to Presenters: Earl Johnson, Au.D., Ph.D.

**Concurrent Sessions** Fopic: Cochlear Implants

litle: Update on the VA Cochlear Implant Program

Presenters: Nancy Cambron, Au.D., Maureen

local VA implant center and how to become a cochlear practice guidelines will be introduced and indications determine implant candidacy, refer potential cochlear implant candidates, establish a relationship with your implant center. The revised cochlear implant clinical session will be appropriate for beginner, intermediate The presenters will discuss current status of the VIHA for bilateral implantation will be discussed. This cochlear implant program, and detail how to as well as advanced practitioners. Wargo, Au.D., MBA

Fitle: Medical and Surgical Considerations in Fopic: Cochlear Implants Cochlear Implantation Fime: 2:00-3:00

The medical evaluation process to determine cochlear implant candidacy and review surgical planning and implantation and implantation of those with some complications will be discussed. Additional considerations related to bilateral cochlear Presenters: Clifford Hume, MD, Ph.D. residual hearing will also be discussed

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### **Concurrent Sessions**

Presenters: LTC(P) Marjorie A. Grantham, Ph.D. Popic: Hearing Conservation Part I **Fitle: Hearing Conservation Basics** lime: 1:00-1:45 (Army)

Title: Tri-Service Unique Program Challenges Presenters: LT Amy McArthur (Navy) Time: 1:45-2:30

audiograms and education. Each of the services (Army, Presenters: Eric Koenig, Elizabeth McKenna, Capt, effective hearing conservation program (HCP).OSHA of a HCP is vital, from noise surveys to engineering and other military regulations provide guidance on hearing loss due to noise exposure is the goal of an how to manage an effective HCP. Each component program components differently based on service controls and hearing protection to monitoring disability claims in the VA today.Prevention of Hearing loss and tinnitus remain at the top of USAF, BSC, CCC-A, F-AAA (Air Force) Navy and Air Force) implement these Title: DOEHRS - HC Update unique challenges. Firme: 2:30-3:00

**Concurrent Sessions** 

Fime: 1:00-1:25 Copic: Tinnitus Fitle: Hearing Aid Considerations for Tinnitus

management. These aspects of hearing aid fittings also will be discussed in relation to the Neurophysiological This presentation will examine the potential negative address the special needs of tinnitus patients so that encourage attendees to critically evaluate their own fitting paradigms and modify them as necessary to or positive impact of typical aspects of hearing aid fittings from the perspective of facilitating tinnitus their actions facilitate, rather than inadvertently Model and PTM. Real-world examples will be provided. The goal of this presentation is to ninder, successful tinnitus management. Presenters: Steven L. Benton, Au.D.

**Fopic: Tinnitus** 

Fitle: Effects of Patient and Stimulus Factors on Speech in Noise Perception

culties, particularly in challenging environments such aging individuals, and other individuals (e.g., patients Many patients report subjective speech-in-noise diffiwith traumatic brain injuries, multiple sclerosis, etc.). These difficulties affect individuals with hearing loss, tion will discuss the importance of SNR and hearing noise. Finally, the effects of phoneme scoring versus not tested in many audiology clinics. This presenta-However, word-recognition in background noise is status in affecting speech perception in background Presenters: Tina Penman, Au.D., CCC-A, FAAA as busy restaurants, social gatherings, and the car. word scoring will also be discussed.

> well as some of its challenges and projected changes or upgrade to the single ear software will be discussed as

upgrades.

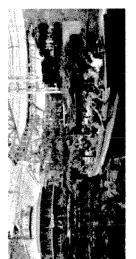
DOEHRS-HC system has had to upgrade its software

standards and service component differences, the

As the Department of Defense manages OSHA

BORE

to keep pace with these transformations. The recent



Company at Gaylord The Delta Riverboat Opryland

### **Concurrent Sessions**

Fime: 1:50-2:15 **fopic: Tinnitus** 

Fitle: Utility of Standard DPOAEs in the

Evaluation of the Normal-Hearing Tinnitus Patient

"approximately 20% of patients with tinnitus have According to Jastrebof and Hazell (2004), Presenters: Steven L. Benton, Au.D.

reactions of the auditory system, resulting in tinnitus." normal hearing. This is because changes too small to can result in heterogeneity and trigger compensatory subjects' absolute DPOAE amplitudes and signal-torecommendations based upon the final results from be detectable on a standard audiogram, if localized, noise ratios to widely utilized normative data from Data currently are being analyzed for patients with both Boys Town and Vanderbilt. We plan to offer normal hearing thresholds. We are comparing all subjects.

Time: 2:15-3:00

Topic: Vestibular

Presenters: Owen D. Murnane, Ph.D. Title: The Video Head Impulse Test

The head impulse test (HIT) is a bedside test used to This presentation will discuss the procedures for this test and use of a high-speed digital video camera to record the HIT (video head impulse test or VHIT). individual horizontal semicircular canals (SCCs). identify peripheral vestibular deficits of the

Break 3:00 - 3:30

lime: 3:30-5:00

Fitle: Bimodal hearing versus bilateral cochlear implantation: is there a functional difference? Fopic: Cochlear Implants

Presenters: René H. Gifford, Ph.D.

are a number of adults making use of bimodal hearing chlear implantation as standard of care treatment for severe-to-profound sensorineural hearing loss, there answers regarding whether a functional difference is presentation will describe the results of a number of (cochlear implant + contralateral hearing aid). This listening experiments conducted with bimodal and bilaterally implanted adults and attempt to provide Though many insurers have identified bilateral co-

observed between these groups.

opic: Technical Review Jime: 3:30 - 5:00

**Concurrent Sessions** 

10-15 minute presentations for all exhibitors.

implementation of a walk in clinic for both technical hearing aid issues (repairs) and follow-up care litle: Team Approach to Follow Up Care **Sopic: Aud. Managment and Specialized** This presentation will discuss successful Presenters: Laura A. Cote, Au.D. lime: 3:30-3:50 Audiometry

A P D S E C

**Fopic: Aud. Managment and Specialized** Fime: 3:50-4:10 Audiometry

(programming).

Fitle: St. Cloud VAMC Mobile Audiology

Unit-Part 2

2011 JDVAC we presented Part 1. At that time, some some of the benefits that we have experienced as well audiology unit, with implementation in 2011. At the cussed. We had just begun using it at the time of that a Rural Health Initiative grant to purchase a mobile as some of the issues that we have run into. We will discuss the money saved and the numbers of actual of the issues in purchasing and preparing were disconference. This presentation is designed to show veterans seen in the van since we began using it in The St. Cloud VAMC applied for, and was granted Presenters: Alan Sias, Au.D.

### **Concurrent Sessions**

Presenters: CDR Antony Joseph, Au.D., Ph.D., litle: Fleet Hearing Loss Prevention Project: Iopic: Aud. Managment and Specialized Hearing Protection Field Performance Fime: 4:10-4:30 Audiometry

individual hearing loss prevention (IHLP) training off-the-shelf hearing protection devices (HPDs). A pilot investigation focused upon the effect of on the attenuation performance of commercial CCC-A, CDR Joel Bealer, MSC, USN

Time: 4:30-4:50

Fopic: Aud. Managment and Specialized Audiometry

**Fitle: Tactical Communications and Protective** Systems: Update on Efforts in Research and Acquisition

This will be a two-part, joint presentation by a panel researchers, in order to get the most from this family Presenters: LTC(P) Marjorie A. Grantham, Ph.D. providing a) an overview of current research in this and technology updates, as well as from how to best what acquisitions call a "program of record", where long-term funding and sustainment are handled by area and b) how TCAPS technologies make it into benefit from hearing the latest in TCAPS research awareness, improved SNR, and even GPS location acquisition program managers. Audiologists will communications facilitation, auditory situational interact with acquisition programs and auditory counterpart acquisitions subject matter experts, of USA, USN, and USAF researchers and their of technologies providing hearing protection, information.

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management of patient diagnosed with ANSD. The

recommendations for intervention and

illustrating contrasting intervention/management strategies. Conclusions and recommendations for

presentation will also review of two case studies

### **Concurrent Sessions**

lopic: Aud. Managment and Specialized lime: 4:50-5:10 Audiometry **little: Hearing Center of Excellence: Developments** 

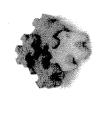
in Information Management

related to traumatic brain injury, for the DOD and the rehabilitation of hearing loss and auditory system injury, including auditory-vestibular dysfunction prevention, diagnosis, mitigation, treatment, and The HCE leads a collaborative effort to address Presenters: Mark Packer, Col(s) USAF, MD

Dys-synchrony/Auditory Neuropathy. Discussion will include diagnostic assessment techniques along with Presenters: Ben Sierra, Au.D., Col, USAF, (ret.) litle: Auditory Neuropathy Spectrum Disorder The purpose of this presentation is to review and discuss current concepts in the assessment, (ANSD) - Intervention and Management lopic: Aud. Managment and Specialized intervention and management of Auditory Time: 5:10-5:40

intervention and management will be discussed. MAA Banquet 6:00-8:00





### **loint Sessions**

# Wednesday-February 27, 2013

Fitle: Announcements Fime: 8:00

Time: 8:30-9:30

Fitle: Hearing Conservation

of noise on the inner ear. Many laboratories have now the door to novel interventions that reduce the effects that noise-induced free radical formation leads to cell to prevent or reduce NIHL will be reviewed. Human death and hearing loss. This key finding has opened by others and clinical trials in our laboratory will be clinical, social, and economic issue. We now know Scientific data supporting the use of specific agents clinical trials are a critical next step. Efforts to date Noise-induced hearing loss (NIHL) is a significant ("antioxidants") reduce NIHL in animal subjects. demonstrated that free radical scavengers Presenters: Colleen G. Le Prell, Ph.D.

Break/Exhibit Hall 9:30 - 10:00

Presenters: Mark D. Packer, Col(s) USAF, MD Title: Acoustic Trauma Time: 10:00-11:00

**Concurrent Sessions** 

Fime: 12:00-1:30 **Fopic: Vestibular**  litle: Multi-Disciplinary Approach to Management

Presenters: Faith W. Akin, Ph.D., Sharon Polensek, MD, Ph.D., Courtney Hall, PT, Ph.D. of the Dizzy Patient

current approaches for vestibular rehabilitation will be " approach to the assessment and treatment of the dizzy patient from the perspective of a neurologist, physical therapist, and audiologist. Specifically, best practices vestibular laboratory testing (horizontal canal and formulation of differential diagnosis, and gait and otolith function), neurological assessment and balance assessment. The theoretical bases and This session will focus on a multi-disciplinary and clinical usefulness will be described for discussed.

Topic: Hearing Conservation Part II Time: 12:00-12:45

Conservation - How we Interface with IH, Safety, Title: Multidisciplinary Nature of Hearing Presenters: LT Chris Duhon, Au.D. (Navy) OH, Public Health

Fime: 12:45-1:30

AZHWA

Presenters: Maj John Andy Merkley, Au.D. (Army), Lynne Cook, Au.D (Navy), Elizabeth McKenna, Capt, USAF, BSC, CCC-A, F-AAA (Air Force) Fitle: Tri-Service Question and Answer Panel

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partners in fields of Occupational Medicine, Industrial members of a multidisciplinary team, we troubleshoot Hygiene, Safety and Public Health to name a few. As challenges as we interface with different training and More and more military audiologists are working in work environments, profiling systems and retention HCP's that service a diverse population that spans standards. As a profession, we also find ourselves working closely with our allied health and science problems and develop courses of actions that may each branch of service. This comes with unique Department of Defense and conceivably the VA have implications across our sister services, the

Finally, there will be a question and answer panel for an open discussion forum with experts in Hearing Conservation from each of the branches of service.

Lunch/Exhibit Hall 11:00-12:00

### **Concurrent Sessions**

Time: 12:00-12:30

Topic: Cochlear Implantation
Title: Benefit of Cochlear Implantation in Patients
with Auditory Neuropathy Spectrum Disorder

Presenters: Giselle M. Ostolaza

This presentation will discuss and summarizes literature based evidence in support of cochlear implantation for patients with ANSD.

Time: 12:30-1:00

Topic: Cochlear Implantation
Title: New Developments in Implantable and Bone
Conduction Technology

Presenters: Joyce Crawford, Au.D., CCC-A, Mark D. Packer, Col(s) USAF, MD, Maj Travis J. Pfannenstiel, MD, USA MC, Capt Daniel Williams, Au.D., USAF

The hearing health care team at San Antonio Military Health System has been dedicated to providing state-of-the-art care for patients previously identified as poor hearing aid candidates. This presentation will explore some new options, including middle ear implants, bilateral bone

that utilizes the natural bone conduction characteristics of the upper molars.

anchored hearing aids, and an in-the-mouth device

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Time: 1:00-1:30

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Topic: Cochlear Implantation Title: Extended High Frequency Audiometry Presenters: Danny Secor

The concept of extended high frequency audiometry is something that all audiologists are taught in graduate school but it is seldom used unless performing serial audiograms for patients undergoing treatment involving ortoxic medications in a hospital setting. In this brief presentation the basics of the procedure, the appropriate applications of its use, and new literature on the topic will be reviewed and discussed.

Break 1:30 - 2:00

### Concurrent Sessions

Fime: 2:00-4:00 Fopic: Vestibular Fitle: Multi-Disciplinary Approach to Management of the Dizzy Patient continued.

Presenters: Faith W. Akin, Ph.D., Sharon Polensek, MD, Ph.D., Courtney Hall, PT, Ph.D. This session will focus on a multi-disciplinary approach to the assessment and treatment of the dizzy patient from the perspective of a neurologist, physical therapist, and audiologist. Specifically, best practices and clinical usefulness will be described for vestibular laboratory testing (horizontal canal and otolith function), neurological assessment and formulation of differential diagnosis, and gait and balance assessment. The theoretical bases and

current approaches for vestibular rehabilitation will be discussed.

Fime: 2:00-2:30

Topic: Hearing Conservation Title: Preserving Hearing in the Military with an Educational Training Kit

goal is a fresh, engaging, and motivational experience. cation with separate versions for Army, Navy, Marine Corps, and Air Force. The first version is aimed at the uture hearing impairment, incorporation of testimonials from hearing-impaired peers and superiors, the These tools are being developed for DoD-wide applinoise-induced hearing loss. Through development of nearing-loss and tinnitus simulations to demonstrate and ncrease individual accountability in preventing ret most military personnel are not compliant. Current training tools for personnel are not effective. prove awareness of the effects of noise on hearing Most military hearing loss could be prevented by the use of appropriate hearing-protective devices, This project addresses the Navy's directive to im-Presenters: Lynne Marshall, Ph.D. Army population.



# Concurrent Sessions | | C

ime: 2:30-3:00

Topic: Hearing Conservation

Title: Generating Prevalence Data by Use of Noise North Calculations in Normal and Hearing Impaired Military Personnel

Presenters: CDR Autony Joseph, Au.D., Ph.D. Historical data from the DOEHRS-HC database served as reference data for analysis. A sample of individuals with normal hearing thresholds and positive for notched configuration was selected for specific analysis of their annual screening data. A matched control sample of individuals who were negative for notched configuration was analyzed for comparison. The incidence of later development of anotch was investigated

Fime: 3:00-4:00

Iopic: Hearing Conservation I'ide: Navy Regional HCP Update Presenters: Kelly Paul, Lynn Cook, LCDR Jason Iones

Hearing Conservation Program policies, practices and audiology community and regional issues will serve to Program Managers will present a state-of-the-regions mitigation of noise induced hearing loss in the Navy Medicine West and National Capitol Area. Each of Marine Corps Hearing Conservation Program falls these regions has a Regional Hearing Conservation Program Manager (HCPM) who oversees, inspects Echelon 2 command, which is further divided into group presentation on the state of the occupational address to the Navy Audiology community. This Responsibility for medical aspects of the Navy & and supports Navy Occupational Audiology and regions on current issues and provide necessary update all Audiologists and HCPMs within the communication and feedback toward resolving under the Bureau of Medicine and Surgery, an services within these regions. These Regional roadblocks and longstanding challenges to the Echelon 3 regions: Navy Medicine East, Navy and Marine Corps.

### **Concurrent Sessions**

lime: 4:00-4:30

Topic: Hearing Conservation Title: Landing on the Roof-Second Approach Presenters: Kurt Yankaskas

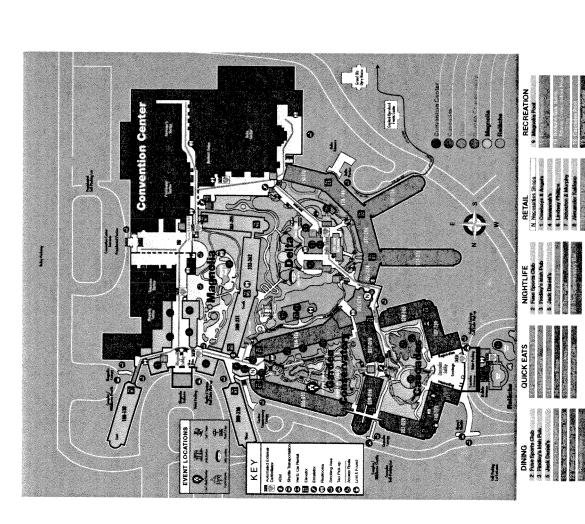
response to high noise environments. It reviews other DoD noise sources as well. The information presented levels and examines some of the medical information hearing protection on aircraft carriers. It reviews the the US Navy to mitigate noise and develop advanced This presentation revisits the efforts by the Office of Naval Research (ONR) and other organizations in military operations. It includes an overview of the aircraft carrier evaluating a new damping material engineering efforts in mitigating below deck noise relating to hearing loss, hearing conservation and impact of noise induced hearing loss (NIHL) and most extensive and detailed measurements on an herein will be used in the design of future aircraft successful tests will lead a new noise mitigation strategy on the 03 Level (gallery deck). This using 3-D acoustic holography at-sea. These investigation standards for advanced hearing presentation provides the current status of carriers and other DoD systems and set the protection.

Time: 4:30-5:00

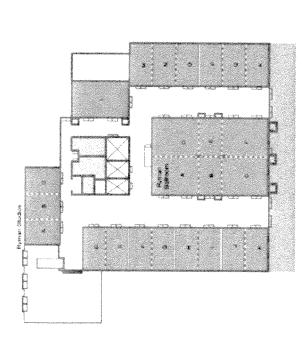
**Fopic: Hearing Conservation** 

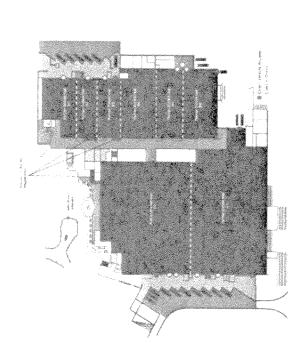
Title: Determining OSHA Reportable Hearing Loss Presenters: Erin E. Artz, Capt, USAI; BSC, Au.D. A review of past and current guidance on OSHA reportable hearing loss was completed and most recent recommendations determined. Case studies were selected to demonstrate how recommendations and guidance are applied to hearing loss identified in a hearing conservation program, and how information from multiple specialities is integrated into making an accurate provider determination.

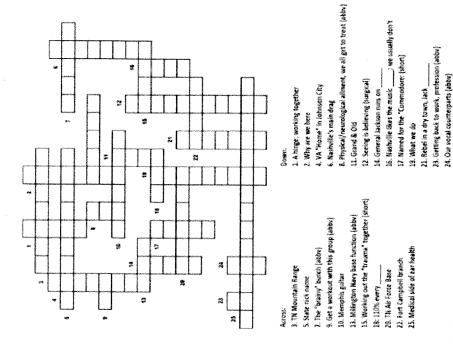
Fime: 2:00-4:00 Fopic: Technical Review 0-15 minute presentations for all exhibitors.



Meeting Room	Section of Convention Center	Level	Nearest Elevator
Bayou A-E	Delta Section	M (Mezz)	D4
Belle Meade A-D	Magnolia Section	M (Mezz)	M2
Belmont A-C	Magnolia Section	M (Mezz)	M2
Canal A-E	Delta Section	M (Mezz)	Ďφ
Cheekwood A-H	Magnolia Section	M (Mezz)	M2
Delta Island A-F	Delta Island (above retail shops)	M (Mezz)	DS
Delta Island Boardroom	Delta Island (above retail shops)	M (Mezz)	DŞ
Delta Ballroom A-D	Delta Section	3	D4
Delta Ballroom Lobby & Reg Desk	Delta Section	2	D4
Governor's Ballroom A-E	Governor's Section	7	Id
Governor's Chamber A-E	Governor's Section	7	Id
Hermitage A-E	Magnolia Section	M (Mezz)	M2
lackson A-F	Presidential Section	M (Mezz)	ы
Lincoln A-E	Presidential Section	M (Mezz)	Id
Magnolia Ballroom	Magnolia Section	M (Mezz)	M2
Magnolia Boardroom A-E	Magnolia Section	M (Mezz)	M2
Presidential Ballroom A-E	Presidential Section	2	M
Presidential Ballroom A & B	Presidential Section	M (Mezz)	Id
Presidential Chamber A & B	Presidential Section	2	ы
Ryman Ballroom A-F	Tennessee Section	0	Id
Ryman Exhibit Hall C1 & C2	Delta Section	0	₽C
Ryma Exhibit Hall B1-B6	Presidential Section	0	Id
Ryman Studio A-R	Tennessee Section	0	Id
Tennessee Ballroom A-E	Tennessee Section	2	Id
Washington A & B	Presidential Section	M (Mezz)	Ы
Water's Edge	Delta Section	0	DS







Answers are on the next page!

Thank you Jennie Newton for creating this Crossword Puzzle!

### Local Attractions

### Hotel Attractions:

Fine Dining:
Old Hickory Steakhouse
Ravello-Southern Italian Cuisine
Upscale/Casual Dining:
Solario-Authentic Mexican Cuisine
Cascades American Cafe

Wasabi's Sushi

Quick Eats:
Findley's Irish Pub
Jack Daniel's
Paisano's Pizzaria & Vino
Stax Burgers
Relache and Magnolia Pool Bar & Grill
In-Room Dining

Treats.
Cocoa Bean Coffee
Christie Cookie
Haagen-Dazs Ice Cream

### Nashville Area Attractions:

Grand Ole Opry
Ryman Auditorium
Wildhorse Saloon \*
General Jackson \* Showboat
Gountry Music Hall of Fame
Frist Center for teh Visual Arts
Nashville Zoo at Grassmere
Parthenon
The Hermitage
Cheekwood Botanical Gardens
Belle Meade Plantation
Belmont Mansion & Farm
The Fontanel Mansion & Farm
Travellers Rest Plantation & Masseum

We would like to thank the Nashville Music City and Chamber of Commerce for providing attraction guides and walking maps!

Answers to Crossword Puzzle:	word Fuzzie:
Across:	Down:
3. Smokies	1. Joint
<ol><li>Volunteer</li></ol>	<ol><li>Veterans</li></ol>
7. Neuro	4. Mountain
9. PT	<ol><li>Broadway</li></ol>
10. Gibson	8. TBI
13. NSA	11. Opry
15. Poly	<ol> <li>Opthamology</li> </ol>
18. Day	14. Steam
20. Arnold	16. Loud
22. Army	17. Vandy
25. Otolaryngology	19. Audiology
	21. Daniels
************	23. OT
	24. SLP

Sure the Date

The New Trapitana. La Viena, NV