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The Voice

The Voice

VOICE OF THE EDITOR

Nadine Connor, PhD

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NOT LITTLE ADULTS

SPECIAL CONSIDERATIONS IN THE CARE OF CHILDREN'S VOICES

BY NADINE CONNOR

Voice assessment, management, and vocal training with children present special challenges. Children are far from little adults, as mentioned in Dr. Hartnick's article. Children also demonstrate a great deal of variability across the childhood age-range due to inherently dynamic processes of childhood. That is, voice needs and concerns vary throughout childhood. We have found that young children are very concerned with physical functioning related to voice, whereas adolescents express emotional concerns relative to their voice with greater frequency. We have

also found that children as young as six years old with voice disorders are very much aware of their own vocal limitations, contrary to prior views that lack of awareness by children hampers vocal treatment. All of these considerations interact in painting a complex, adaptable clinical picture that must be approached with knowledge and experience. In this issue of *The Voice*, we have brought together an eminent group of speech-language pathologists, pediatric laryngologists, and a teacher of singing to provide us with their insights into effective ways of working with and reaching children.



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NEW APPROACHES, CHALLENGES, AND QUESTIONS IN PEDIATRIC VOICE DISORDERS

BY CHRISTOPHER HARTNICK

Children are not small adults; so goes the favorite pediatric maxim. But, like their older brethren, they also need to speak, to interact, and to communicate. The challenges present as infants become toddlers and then children is how to define and quantify the dynamic process that is "normal"

vocal development, "normal" vocal anatomy and "normal" acoustic range for children across the age-range, and what to do when these go astray.

We are learning more and more about the larynges of children as they mature and develop. From the wonderful work of Hirano in the 1980's through some work done in our own laboratory,^{1,2} we know that a child is born with a single

layered lamina propria comprising the submucosa of that child's vocal fold; by teenage years, this structure evolves to the more mature three layered structure we see in the adult larynx. Why or exactly when does this change occur? We are not sure. Recently, novel non-invasive technology such as Optical Coherence Tomography has been developed that holds

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NEW APPROACHES, CHALLENGES, AND QUESTIONS...CONT.

(Continued from page 1)

the potential to help answer such questions,³ but more work remains. It may be that children with different lamina propria structure are more prone to phonotrauma at critical periods of development when morphologic changes are occurring (and therefore it may be that voice therapy is more effective at certain ages or moments of development) but we need to explore this further.

What system should we use to assess the acoustic and aerodynamic profile of children? We are beginning to build a normative dataset for children,⁴ but recent work has questioned whether we should be using single utterance or continuous speech samples for children.⁵ This is an exciting area where more challenges remain to be overcome.

Where there are variations and controversies on objective vocal measures, recent work has focused on objective, validated quality of life measures that focus specifically on voice related constructs. Two widely used examples are the Pediatric Voice Related Quality of Life (PVRQOL) and The Pediatric Voice Handicap Index (PVHI).^{6,7} The PVRQOL is the primary outcome measure for the current multi-centered NIH funded trial evaluating children with vocal nodules.

For children with vocal nodules, does voice therapy work? We think so, but this remains to be proven in a rigorous fashion. There currently is a NIH funded multi-centered trial underway to help answer this question (feel free to email me for more information); once we have the answer to this question, then we can look more closely at what form of voice therapy works better than another.

Finally, what about the special case of children with severe dysphonia from vocal fold immobility? What are the roles of vocal fold injection, thyroplasty, and ansa cervicalis to recurrent laryngeal nerve anastomosis and how does this thought process differ from the adult counterpart scenario?⁸ Increasingly more often, I find myself recommending earlier nerve anastomosis procedures for children for example with VFI after PDA ligations and with

laryngeal EMG tracings that suggest a poor rate of recovery). These are only a few of the exciting questions that continue to challenge our field!



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"...what about the special case of children with severe dysphonia from vocal fold immobility? What are the roles of vocal fold injection, thyroplasty, and ansa cervicalis to recurrent laryngeal nerve anastomosis and how does this thought process differ from the adult counterpart scenario?"

WORLD VOICE DAY—HIGHLIGHTS FROM 2013 IN PHILADELPHIA



MASTER CLASS WITH MELISSA CROSS

for singers of rock music took place at the Academy of Vocal Arts. We heard the near thirty participants learn to do a healthy “scream”!

Polygon Comedy - Musical Variety Show

Then executive assistant Madonna Marie Refugia (pictured right) not only planned this entertaining event, but made us laugh throughout. It took place at L’Etage in Philadelphia .



DR. ROBERT T. SATALOFF

VOCAL HEALTH FOR TEACHERS

A seminar for teachers at Drexel University with presentations by Dr. Robert Sataloff, Bridget Rose, CCC-SLP, Stephanie Fort, CCC—SLP, Donna Snow, MA, Dr. Ellery Panaia and Heidi Brown. The sessions addressed anatomy and physiology, vocal health, warm-up and cool-down exercises, chiropractic care for the voice, and relax and support exercises for the voice. The attendees were effusive in their enthusiasm for this day-long seminar.

WORLD VOICE DAY—HIGHLIGHTS FROM 2013 TVF CHAPTERS AND AFFILIATIONS

Recognizing that World Voice is more than a day, Cleveland Clinic observed World Voice Day 2013 with several activities in April to celebrate the extraordinary voice.

Events include:

- Community health talk with three Cleveland Clinic voice specialists (Douglas Hicks, PhD, Tom Abelson, MD and Richard Freeman, MD, PhD); April 11
- Free public concert at the main campus during lunch with a performance by SonidosDulcés; April 15 and Burning River Rambler, May 2
- Free voice screenings were held at various Cleveland Clinic locations; screening more than 40 patients (Douglas Hicks, PhD, Tom Abelson, MD, Richard Freeman, MD, Paul Bryson, MD, Claudio Milstein, PhD); April 16 and April 24
- Voice surgeon Paul Bryson, MD sang the National Anthem at the Cleveland Indians game; April 16
- Free web chat with voice specialist Claudio Milstein, PhD; April 25
- Collaboration with the Cleveland Clinic and Hard Rock Cafes in Cleveland and Las Vegas to promote voice health with a limited edition puzzle pin for the Cleveland and Las Vegas locations created to celebrate world voice day



Cleveland Clinic
Voice Surgeon, Paul Bryson, MD



Cleveland Clinic
Speech-Language Pathologist, Claudio Milstein, PhD.



Cleveland Clinic / Hard Rock Cafe Puzzle Pin

Cleveland Hard Rock Cafe – Left
Las Vegas Hard Rock Café – Right

—UPCOMING EVENTS, THE VOICE FOUNDATION



World Voice Day April 16

voicefoundation.org
www.world-voice.day.org

IN CELEBRATION OF WORLD VOICE DAY

MusiCares & Philadelphia Ear Nose and Throat
will co-sponsor

Voice Screenings

on April 16th at two Philadelphia locations:
1721 Pine Street and 219 N. Broad Street

PECO'S CROWN LIGHTS

a proud community tradition since 1976.
The following message will be displayed on the
Crown Lights on *April 14-16*:

**"Celebrate WORLD VOICE
DAY 4/16,
www.voicefoundation.org"**

VOCAL HEALTH LECTURE AND EXERCISES FOR YOUTH IN THE ARTS

With Donna Snow, MA

VOCAL HEALTH LECTURE AND EXERCISES FOR FITNESS INSTRUCTORS

With Bridget Rose, CCC-SLPat The Wall Cycling in Manayunk (Phila)

—UPCOMING EVENTS, CHAPTERS & AFFILIATED ORGS

MILWAUKEE

CHICAGO

CLEVELAND CLINIC

The Chicago Institute for Voice Care at the Univ. of IL Medical Center will be doing free stroboscopes on 4/12. That is sponsored by MusiCares, the philanthropic arm of Grammy. We are also planning an educational event at the Old Town School of Folk Music.

Celebrates World Voice Day 2013 by Offering Free Non-Invasive Voice Screenings, Web Chat and Health Talk

VOICE THERAPY FOR CHILDREN

BY KATHERINE VERDOLINI ABBOTT

Over the past decades, numerous advances have been made in approaches to voice therapy for adults. Whereas earlier, traditional models emphasized voice conservation, more recent approaches have focused on methods for training *functional* voice without incurring tissue damage.¹ Moreover, select “strong” voicing patterns may actually have *reparative* effects at the tissue level.² Unfortunately, approaches to voice therapy for children have not kept apace. The few approaches that we learn about for pediatric voice therapy tend to use a variety of behaviorist (Skinnerian) methods to track and control the child’s “vocal abuse” (a problematic term of itself;^{3,4} underscoring an emphasis on vocal “quiescence”). Thus, as for previous generations of voice therapy for adults, currently, children with voice problems are functionally impaired either by their disease or by their cure. This situation is regrettable especially in light of the fact that voice problems appear to be the most common communication disorder among children,^{5,6,7,8,9} and moreover commonly provoke a series of non-trivial negative consequences for quality of life.¹⁰

As for adults, voice problems in children may arise from a large number of medical conditions. However, clinical observations suggest that by far, the most common cause is phonotrauma, that is, laryngeal injury due to voice use. Moreover, even for those conditions not caused by voice use, such as Recurrent Respiratory Papilloma, voice use can be an aggravating factor. If we are to improve on extant models of pediatric voice therapy, a minimum of two questions can be posed. First, what are biomechanical and biological considerations that may point to avenues that allow for *functional* (even loud) voice use, while at the same time preventing new injury and even healing existing injury? Second, what are factors that may influence perceptual-motor *learning* in children, if they are to modify their exist-

ing voice use patterns?

Initial responses to both of these questions have motivated the generation of at least one novel approach to pediatric voice therapy, called *Adventures in Voice*.¹¹ As for many domains in medicine and rehabilitation, most of the relevant research has been conducted on adult subjects. Hopefully, this shortcoming will be remedied in the coming years. For the time being, we are left to speculate about new models of pediatric voice therapy primarily based on the adult literature. A few findings appear relevant and robust for children. First, evidence suggests that for both the pediatric and the adult larynx, a vocal fold “posture” that both enhances voice output intensity (functional factor) and relatively minimizes vocal fold impact stress (pathogenic factor) involves barely adducted or barely abducted vocal folds.¹ This posture tends to be perceptually linked to “resonant voice,” defined as voice associated with perceptible anterior oral vibrations and a sense of phonatory “ease.”¹² Subglottal pressure required for phonation is also minimized using this posture, which further promotes a sense of phonatory “ease” and should reduce the experience of vocal fatigue.¹³ The use of this posture in phonation, especially if accomplished with a semi-occluded vocal tract, is not only not pathogenic for laryngeal tissue; it may have actual biologic restorative effects for laryngeal inflammation.² Findings to this effect are consistent with those for other tissue domains, in which certain forms of tissue mobilization are found to be anti-inflammatory (for review, see Verdolini Abbott et al., 2012).² *Adventures in Voice* and potentially other emerging models of pediatric voice therapy are grounded in these principles that are currently undergoing rigorous testing in at least one large-N, NIH-funded clinical trial (Christopher Hartnick, personal communication).

Turning to the question of learning,

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VOCAL FOLD HYDRATION: THE QUEST TO SUPPORT CLINICAL PRACTICE WITH EVIDENCE-BASED RESEARCH

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another “revolution” in approaches to pediatric voice therapy is seen with a turn away from traditional “operant conditioning” models, which emphasize environmental control in learning, to more cognitively based models, which emphasize the active role of the child in learning. It is regrettable to note that although operant conditions models have been discounted on numerous fronts for the better part of the past half century, such models are still enthusiastically embraced in most pediatric training in speech-language pathology. An alternative approach arising from cognitive science instead emphasizes attention and active participation by the child, an emphasis on *perception* in motor learning, and the use of *functional* exercises in voice therapy.¹¹ Also these assumptions are currently under investigation (Christopher Hartnick, personal communication).

In sum, there is some optimism about currently emerging, novel approaches to voice therapy for children. Efforts are underway to examine the proposed hypotheses they embed, in both basic and clinical science trials. Hopefully, a next generation of pediatric voice therapy is just around the corner. In fact, some of the “fun” exercises that the pediatric setting demands might even be profitably sequestered for use with adults.

B

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“...what are factors that may influence perceptual-motor learning in children, if they are to modify their existing voice use patterns?”

FACT-BASED VOICE PEDAGOGY FOR CHILDREN

BY ROBERT EDWIN

“My choir teacher told me to fill up my stomach with air and sing from my diaphragm.” So says my new young student with a smiling face who is bringing me more bad news from the front: many voice pedagogues still remain hopelessly stuck in pre-science, antiquated, and grossly inaccurate terminology and technique. The most common excuse I hear from colleagues is that imagery is easier for children to understand than fact-based instruction. That may be somewhat excusable if the imagery actually matched up with the function. Air-filled stomachs and singing

“What make the exercises more engaging for kids are the stories we develop around them.”

diaphragms no more exist in the twenty-first century than they did in the sixteenth century. Nowadays, we’re supposed to know better.

Mine is an independent voice studio in New Jersey where over half my students are under the age of eighteen. I pride myself

on teaching all of them, from the elite professional to the raw beginner, with a fact-based voice pedagogy. That pedagogy takes the form of a systematic process I call the “t^{ions}.” The “t^{ions}” include body position, respiration, audiation, phonation, registration, resonation, articulation, motivation, and emotion. The process is age-appropriate, play-oriented, and based on telling stories with the voice and body so that the singer and actor are often engaged.

At any given moment in a lesson, one or more of the “t^{ions}” is being highlighted and addressed either in technique or repertoire. For example, as the kids start their lessons with their arms over their heads stretching side to side to lift the rib cage and align the body, they are reminded that balanced posture (body position) not only makes the whole body work better but looks good as well. They know, however, if they have to play a character who is sad or shy, letting the body position slouch will help tell that story.

Because the larynx is, for all intents and purposes, a gender-neutral instrument, I insist that all my students use the entire range of their voices, from their lowest to their highest notes. Even at a young age, children often have clearly defined ideas about what a boy sound is and what a

girl sound is. Phonation and registration exercises, therefore, can be a bit challenging to children who have been told that girls sing high and boys sing low. Kids (or anyone for that matter) who vocalize in only one register (mode 1 for “chest” and mode 2 for “head” are the terms used in this studio) are the equivalent of athletes who go to the gym and exercise only one side of their body.

Vocalises that support the “t^{ions}” include all the standard patterns: scales, major and minor triads and arpeggios, glissandos, lip and tongue trills. What make the exercises more engaging for kids are the stories we develop around them. For example, a five note ascending and descending major scale can be used to sing which foods they like such as “iiiiiiiice cream,” or “puiiiiiiizza.” Their faces and voices often reflect the pleasure they experience as they sing about these foods. Conversely, a minor scale allows them to sing and express their reactions to their less favorite foods such as “Bruuuuuuussel sprouts,” or “suuuuuuuushi.” Encouraging emotion by partnering singer and actor in voice technique allows for a much more dynamic and effective transition into repertoire.

Animal sounds can introduce children to the many resonation choices



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Lessons

FACT-BASED VOICE PEDAGOGY FOR CHILDREN, CONT.

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they have. A cow “mooo” glissando, for example, explores the darker oscuro tone while the sheep “baaa” highlights the brighter chiaro quality. They can feel their vocal tracts widening and narrowing, and they can experience both dramatic and subtle register shifts as the glissando goes higher and lower in their respective ranges.

Articulation exercises bring attention to the word shapers. Scales or triads on a repetitive “ya” for the jaw, “ba” for the lips, “ta” for the teeth, “la” for the

tongue, and “na” for the soft palate, put the young singer in touch with the moving parts; and agility is gained as they are able to do the exercise at faster tempos.

Working with the aforementioned systematic exercises, the variations are practically endless and are limited only by the imagination of the teacher. Lessons become “serious play” designed to develop healthy, functional, expressive, and efficient instruments that obey the laws of nature rather than defy them.

How rewarding it is to see kids learn and grow in

the art and science of singing. How satisfying it is to know that they know how their bodies really work: that stomachs are for food and drink, that air goes into the lungs, that diaphragms help draw that air in, that sound comes out the mouth and nose rather than the tops of their heads or through their eyes and, that all of the “tions” playing well together help them become better singers. For this teacher, fact-based child voice pedagogy brings true gratification!



“Animal sounds can introduce children to the many resonation choices they have.

*become serious
play*



SPECIAL CONSIDERATION IN THE ASSESSMENT AND TREATMENT OF CHILDREN WITH VOICE DISORDERS

BY LISA KELCHNER, PhD AND
ALESSANDRO DE ALARCÓN, MD, MPH

In recent years there has been a revitalized interest in the care of children with voice disorders. This focused attention has resulted in advances in the evaluation, treatment, and discovery of new solutions for the challenges faced by this important population. The causes of pediatric voice disorders vary, ranging from acquired benign lesions to complex airway conditions. Optimally, care of children with voice disorders relies on an interdisciplinary approach to care that includes comprehensive assessment and intervention options. In some locations these sub-specialized services are not readily available and must be accomplished through a collaborative effort on the part of solo, public school, and/or hospital based (or specialty practice) clinicians.

Assessment of Pediatric Voice Disorders: Children are often very willing participants in the voice evaluation process. Using an inspired and creative approach and allowing time for practice examiners can capture the various necessary data that aid in diagnosis and inform care. Comprehensive protocols including the collection of acoustic, aerodynamic, perceptual, endoscopic, and quality of life data are routine in most specialized pediatric voice clinics. Of course, these protocols are modified as needed depending on the age and ability of the child as well as the goals of the evaluation. Importantly, in the last few years voice equipment has been modified for use with young children making certain examinations easier to accomplish. For example, there is now a pediatric rigid scope (Pentax Medical, Montvale, NJ) for imaging that is better tolerated by the child and permits excellent views during oral digital-endo/stroboscopic exams. Flexible fiberoptic and distal chip endoscopic procedures can be conducted using instruments as small as 2.8 mm (Olympus distal chip) and 2.2 mm (fiberoptic).

Aerodynamic and acoustic equipment such as the Phonatory Assessment System

(PAS) (Pentax Medical) offers pediatric-sized masks to be used to obtain airflow and pressure measures. Occasionally, the children will object to the mask or have some difficulty following the instructions for the individual protocols, but typically even the younger children do well. Of equal importance is the fact that some normative data exist for these protocols to aid in interpretation of findings. Of course, many sites or solo practitioners do not have access to formal aerodynamic equipment and thus informal measures may be used (e.g. maximum phonation time; S/Z ratio). Likewise, free downloadable software is available for acoustic analysis. Essential environmental controls (quiet), good microphones, and a consistent approach that ensures capturing the best possible sample are fundamental assessment elements regardless of clinical setting. However, it is important to consider that data collected in a clinical setting may not be representative of the child's voice production in their naturalistic setting. Careful intake should help the clinician and family discern the actual (and potentially problematic) voice use patterns.

The Consensus Auditory Perceptual Evaluation of Voice (CAPE-V) (ASHA, 2003) is the standard means by which the clinicians in our clinic rate voice quality. Voice quality judged during production of free speech, sustained vowels and production of six sentences are rated along a visual analogue scale for the parameters of overall severity, breathiness, roughness, strain, pitch and loudness. With the exception of very young or developmentally delayed children, repeating or reading the sentences presents no particular challenge. If modifications are needed, it typically tends to include reducing the length or in some cases, linguistic complexity of what has to be repeated. Although examining inter and intra rater agreement during its use with children has been reported in the literature, a formal validation of the

(Continued on page 12)



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CAPE V as a pediatric perceptual instrument has not yet been completed.

It is critical to gather data regarding the impact that the presence of the voice disorder has on the child's social, emotional, physical and educational well-being. Two instruments currently available include the Pediatric Voice Handicap Index (pVHI) and the Pediatric Voice Related Quality of Life (PVRQOL). Both are parent-proxy instruments that yield sub and overall severity scores that can be used as pre-post outcome measures across key domains as well as guide discussions with parents regarding the real life effects having a voice disorder has on the child's every-day life. Currently, a multi-site study is underway whose purpose it is to validate a voice module for the Pediatric Quality of Life (PedsQL®-Voice Module). This module will provide data that are age stratified and gathered from both the child-patient and parent perspective.

Treatment of Pediatric Voice Disorders: Behavioral treatment of pediatric voice disorders incorporates use of time-tested approaches of vocal hygiene, indirect (e.g. parent and teacher education; behavioral modifications) and direct voice therapy techniques. Several of the direct voice therapy techniques used with adults (e.g. resonant voice, semi-occluded vocal tract, and vocal function exercises) can be successfully adapted and modified for use with children depending on their age and ability to follow instructions and imitate vocal gestures. A number of patented and program specific therapeutic approaches for children are also available. Regardless of

the approach, using positive, creative and motivating activities and reinforcements of desired behaviors is essential to therapeutic success. Integrating the latest voice/gaming software, apps and similar technology with traditional therapy approaches can aid in this process.

Medical and surgical interventions available for management of pediatric voice pathologies have also been advanced in recent years. Voice surgery outcomes in children are being closely monitored with a collective concern for mitigating the potential for life-long voice disorders. The care of the child with childhood voice disorders requires collaboration between the pediatric laryngologist, the speech language pathologist, the parents and the child. Decisions regarding surgical intervention are often individualized and based on shared decision making. Surgery for vocal fold lesion involves traditional microflap techniques and is reserved for children that are deemed good surgical and medical candidates. Vocal fold medialization using temporary injectables can safely be used in children with symptomatic unilateral vocal fold paralysis. Reinnervation using ansa cervicalis has been reported in several series for the management of children with unilateral paralysis and early results appear promising. Complex reconstructive techniques are frequently needed for patients with laryngeal injury or secondary voice problems following airway reconstruction and are now being explored by centers with experience with these patients.



"The care of the child with childhood voice disorders requires collaboration between the pediatric laryngologist, the speech language pathologist, the parents and the child."

VOICE FOUNDATION NEWS

43RD ANNUAL SYMPOSIUM HIGHLIGHTS

Wednesday, May 28

Basic Science Tutorials
Accent Reduction Coaching

Thursday, May 29

Science Sessions
Keynote Speech David Huron, PhD
Quintana Awardee Fari Alipour, PhD
Poster Session
Special Session: Voice Lab - Nuts and Bolts
Vocal Master Class

Friday, May 30

Morning Session - Don't Take My Breath Away
Young Laryngologists Study Group
Vocal Workshops
Voices of Summer Gala

Saturday, May 31

Medical and Speech-Language Pathology Sessions
G. Paul Moore Lecture - Gayle Woodson, MD
PANEL: Psycholaryngology: Things that Drive
You and Your Patient Crazy
Special Session

Sunday, June 1

Medical and Voice Pedagogy Sessions
Interdisciplinary Panel Sunday - Stroboscopy
Oscars



Fari Alipour, PhD



David Huron, PhD

FRIDAY MORNING SESSION

May 30, 2014

Don't Take My Breath Away**Moderator:**

Nancy Pearl Solomon, PhD

Presenters:

John Cohn, MD

Christine Sapienza, PhD

Brenda Smith, DMA

Amanda Gillespie, PhD

Leah Helou, MA, CCC-SLP, PhD Cand.

Aaron Ziegler, MA, CCC-SLP, PhD Cand.



Gayle Woodson, MD

VAN LAWRENCE FELLOWSHIP

NATS AND THE VOICE FOUNDATION



KATHERINE OSBORNE was awarded the 2014 Van Lawrence Award given jointly by the [National Association of Teachers of Singing](#) (NATS) and The Voice Foundation. [More information here](#). Miss Osborne has a Master of Voice Pedagogy from Westminster Choir College and is currently in the Doctor of Musical Arts program, Singing Health Specialization, at Ohio State University. Congratulations!

STROBOSCOPY OSCARS
2012 FINALISTS

THE RETURN OF THE STROBOSCOPY OSCARS

CALL FOR STROBES

You will be happy to know that 2014 marks **The Return of the Stroboscopy Oscars** at the 43rd Annual Symposium: Care of the Professional Voice. The format will include different categories and special prizes.

Please send your Strobe in an email to Mike Johns by April 15, 2014

Michael.johns2@emory.edu





THE VOICE FOUNDATION

Advancing understanding of the voice through interdisciplinary scientific research & education

THE VOICE FOUNDATION

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SUBMIT NEWS AND UPDATES

If you have an event or an update you would like to share in the newsletter, please email:
office@voicefoundation.org.

[MAY – JUNE 2014]

SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
			43RD ANNUAL SYMPOSIUM			
					GALA	
1 JUNE						
SYMP						

SCHEDULE OF EVENTS

- February 15, 2014—Submission Deadline for the Hamdan International Presenter Award
- March 1, 2014—Proposal Submission Deadline for New Investigator's Forum
- April 16, 2014—World Voice Day
- April 26, 2014 Symposium Registration Deadline for Early Bird Discount
- May 1, 2014 Deadline to reserve room at the Westin Hotel at Symposium Prices.
- May 28–June 1, 2014 43rd Annual Symposium: Care of the Professional Voice
- May 30, 2014—Voices of Summer Gala