



# ANNIVERSARY SYMPOSIUM

Care of the Professional Voice

VIRTUAL EDITION

June 2-6, 2021



THE VOICE  
FOUNDATION



CoMeT

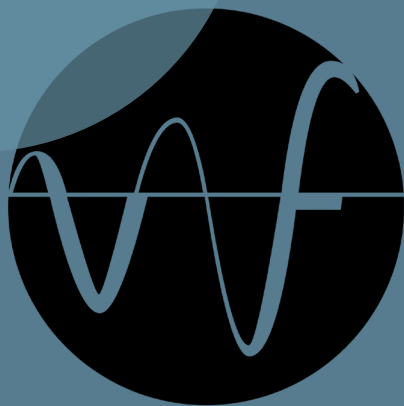
Collegium Medicorum Theatri

Please be aware that  
we are not publishing  
a daily addendum and  
there may be changes in  
the program.  
Thank you!

2021

## Joint Meeting

## VIRTUAL EDITION



### Broadening the Circle

*Everything starts at a higher knowledge level at each meeting.*

~ RT Sataloff, MD, DMA *Broadening the Circle*

Jointly provided by The Voice Foundation and the American College of Surgeons in collaboration with Drexel University College of Medicine, Lankenau Institute for Medical Research, Temple University, The American Institute for Voice and Ear Research, and the Academy of Vocal Arts.

## CONTINUING MEDICAL EDUCATION CREDIT INFORMATION

### Accreditation

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American College of Surgeons and the Voice Foundation. The American College of Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

### AMA PRA Category 1 Credits™

The American College of Surgeons designates this live activity for a maximum of 30 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



AMERICAN COLLEGE OF SURGEONS  
Inspiring Quality:  
Highest Standards, Better Outcomes



AMERICAN COLLEGE OF SURGEONS  
DIVISION OF EDUCATION

### PROGRAM OBJECTIVES

This activity is designed for The Voice Foundation. Upon completion of this course, participants will be able to.....  
Gain familiarity with recent technological, scientific and clinical advances in the study of the human voice;  
Expand perspectives in the diagnosis and treatment of voice disorders and techniques for vocal fold surgery;  
Be able to apply various voice examinations/evaluations, therapy and teaching techniques;  
Foster dialogue and cooperation among the various disciplines concerned with the care of the professional voice;  
Gain interdisciplinary information about clinical and research aspects of neurolaryngology; and,  
Determine the relationship between normal and abnormal voice production and the various means of studying the voice

### DISCLOSURE INFORMATION

In accordance with the ACCME Accreditation Criteria, the American College of Surgeons must ensure that anyone in a position to control the content of the educational activity (planners and speakers/authors/discussants/moderators) has disclosed all financial relationships with any commercial interest (termed by the ACCME as "ineligible companies", defined below) held in the last 24 months (see below for definitions). Please note that first authors were required to collect and submit disclosure information on behalf all other authors/contributors, if applicable.

**Ineligible Company:** The ACCME defines an "ineligible company" as any entity producing, marketing, re-selling, or distributing health care goods or services used on or consumed by patients. Providers of clinical services directly to patients are NOT included in this definition.

**Financial Relationships:** Relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria, ownership interest (e.g., stocks, stock options or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial benefits are usually associated with roles such as employment, management position, independent contractor (including contracted research), consulting, speaking and teaching, membership on advisory committees or review panels, board membership, and other activities from which remuneration is received, or expected. ACCME considers relationships of the person involved in the CME activity to include financial relationships of a spouse or partner.

**Conflict of Interest:** Circumstances create a conflict of interest when an individual has an opportunity to affect CME content about products or services of an ineligible company with which he/she has a financial relationship.

The ACCME also requires that ACS manage any reported conflict and eliminate the potential for bias during the educational activity. Any conflicts noted below have been managed to our satisfaction. The disclosure information is intended to identify any commercial relationships and allow learners to form their own judgments. However, if you perceive a bias during the educational activity, please report it on the evaluation.

### Commercial Promotion Acknowledgement

The Voice Foundation wishes to recognize and thank the following companies for their commercial promotion towards this educational activity.

## ASHA CONTINUING EDUCATION UNITS

**DISCLOSURE INFORMATION:** For the complete disclosure of all relevant financial and non-financial relationships. Please [Click Here](http://voicefoundation.org/annual-symposium1/faculty-disclosures-2021/)  
<http://voicefoundation.org/annual-symposium1/faculty-disclosures-2021/>

### GRADUATE CREDIT

It may be possible to obtain graduate credit through independent study from your University's Dept. of Speech-Language Pathology. Registration must be completed prior to the first day of the Symposium.

APPROVED PROVIDER



**Temple University** is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech-language pathology and audiology. **See course information for number of ASHA CEUs, instructional level and content area.** ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.

This course is offered for up to **04.60 ASHA CEUs** (Various levels, Professional Area)

### NEEDS ASSESSMENT

The specialty of voice care involves rapidly advancing technology, new medical and scientific knowledge, and constant advancement in patient care. State-of-the-art symposia and courses are essential for interdisciplinary communication and education. For fifty years The Voice Foundation's Annual Symposium has fulfilled these needs for the international coM.M.unity.

### LEARNING OBJECTIVES

This activity is designed for The Voice Foundation. Upon completion of this course, participants will be able to..... Gain familiarity with recent technological, scientific and clinical advances in the study of the human voice; Expand perspectives in the diagnosis and treatment of voice disorders and techniques for vocal fold surgery; Be able to apply various voice examinations/evaluations, therapy and teaching techniques; Foster dialogue and cooperation among the various disciplines concerned with the care of the professional voice; Gain interdisciplinary information about clinical and research aspects of neurolaryngology; and, Determine the relationship between normal and abnormal voice production and the various means of studying the voice. Unique Session Learning Objectives [Click Here](#)

### CONFERENCE TAKEAWAY

The 50th Anniversary conference of The Voice Foundation consists of lectures, discussions, and workshops which presents physicians, researchers, speech-language pathologists, and voice trainers with cutting edge information related to evaluation and treatment of the professional voice and its disorders, including recent technological, scientific, and clinical advances in the study of the human voice.

## The Voice Foundation Board of Directors

### Chairman

Robert Thayer Sataloff,  
M.D., D.M.A., FACS

### President

Stuart Orsher, M.D.

### Vice-president

Michael S. Benninger, M.D.

### Secretary

Mary Hawkshaw

### Treasurer-General Counsel

Brian P. Flaherty, Esq.

### Chairman,

#### Advisory board

Michael M. Johns III, M.D.

### Directors

Jean Abitbol, M.D.  
Mara Behlau  
Martina Arroyo  
Harolyn Blackwell  
Claudia Catania  
Simon Estes  
Abdul-latif Hamdan, M.D.,  
FACS  
Gwen S. Korovin, M.D.  
Justice Sandra Schultz  
Newman  
Renata Scotto  
Michael Sheehan  
George Shirley

### Executive Director

Maria Russo, M.M.

### Executive Coordinator

Katie Erikson, M.M.

### Workshop & Audio

#### Visual Coordinator

Phillip Doucette, CCC-SLP

### CME/CEU & Volunteer

#### Coordinator

Bridget Rose, CCC-SLP

### Educational Coordinator

Mary J. Hawkshaw, RN, CORLN

### Video Editing

Valerie Trollinger

# Welcome to the 50<sup>th</sup> Annual Symposium

## CARE OF THE PROFESSIONAL VOICE

### Program Committees

#### SCIENTIFIC PROGRAM

CHARLES LARSON, RONALD C. SCHERER  
NANCY P. SOLOMON, JOHAN SUNDBERG

#### MEDICAL PROGRAM

MICHAEL S. BENNINGER,  
MICHAEL M. JOHNS  
ROBERT T. SATALOFF

#### SPEECH-LANGUAGE PATHOLOGY

MARY (MOLLY) ERICKSON,  
THOMAS MURRY, ROBERT T. SATALOFF

#### VOICE PEDAGOGY

DAVID MEYER , SCOTT MCCOY  
ROBERT T. SATALOFF

#### PANELS

MICHAEL M. JOHNS,  
YOUNG LARYNGOLOGISTS

#### YOUNG LARYNGOLOGISTS

THOMAS L. CARROLL, CHAIR  
JAYME DOWDALL  
JOEL PORTNOY, DAVID ROSOW  
AMY RUTT

### Award Committees

#### NEW INVESTIGATORS RESEARCH FORUM

MARY (MOLLY) ERICKSON, CHAIR  
MARA BEHLAU  
CHRISTIAN HERBST  
SHIGERU HIRANO  
DAVID MEYER

#### QUINTANA VOICE RESEARCH AWARD

RONALD C. SCHERER, CHAIR  
FARI ALIPOUR  
RJ BAKEN  
MARA BEHLAU  
DIMITAR DELIYSKI  
ULRICH EYSHOLDT  
JOHAN SUNDBERG  
Jan Švec

#### Best Student Award Committee

SHAHEEN AWAN, CHAIR  
CLAUDIA ECKLEY  
JEANNETTE LOVETRI  
LYNDSAY LEIGH MADDEN  
STEPHANIE MISONO  
PETER POPOLO

#### HAMDAN INTERNATIONAL PRESENTATION AWARD

RAHUL SHRIVASTAV, CHAIR  
JONATHAN BOCK  
RAY COLTON  
AARON JOHNSON

#### SATALOFF AWARD FOR YOUNG INVESTIGATORS

NORMAN HOGIKYAN, CHAIR  
DALE EKBOM  
ERIC HUNTER  
DENIS LAFRENIERE  
DAVID E. ROSOW  
KRISTIANE VAN LIERDE

#### VAN L. LAWRENCE FELLOWSHIP AWARD

ROBERT T. SATALOFF, CHAIR  
MARGARET BAROODY  
CAROLE BLANKENSHIP  
BRIAN GILL  
ADAM RUBIN  
JOSEF SCHLOMICH-THIER

## WEDNESDAY JUNE 2, 2021



### Welcome to the Joint Meeting CoMeT and The Voice Foundation

(CoMeT Sessions: This part of the program is not available for CMEs)

- 8:00a Welcome to the CoMeT Session of The Voice Foundation Meeting  
*R. Eugenia Chávez, M.D., Ph.D., President, CoMeT LIVE*
- 8:05a Maximum Aerodynamic and Acoustic Power Transfer from The Glottis to the Vocal Tract  
*Ingo Titze, Ph.D.*
- 8:25a Analysis of the DKG Waveform from High-Speed Video  
*Peak Woo, M.D.*
- 8:40a Are Voice Clinicians Interested in Functional Relationships?  
*Sten Ternström, Ph.D.*
- 8:55-9:10a DISCUSSION **LIVE**
- 9:10a Acoustic Filtering of A Selection of Face Masks  
*Ronald C. Scherer, Ph.D., Anna Birkemeier*
- 9:25a Clinical Characteristics of Singers Attending a Phoniatic Outpatient Clinic in France  
*Nathalie Henrich Bernardoni, Ph.D.*
- 9:40a Phoniatic Evaluation and Osteopathic Manipulative Treatment (OMT) In a Patient with Dysphonia from Forestier's Syndrome  
*Orietta Calcinoni, M.D., Valentina Carlile, DO*
- 9:55-10:10a DISCUSSION **LIVE**
- 10:10a Female Voice-Related Sexual Attractiveness to Males: Does It Vary with Different Degrees of Conception Likelihood?  
*Filipa M.B. Lã. Ph.D.*
- 10:25a Influence of Vowel Quality Changes on Vocal Fold Oscillation Patterns  
*Matthias Echternach, M.D.*
- 10:40a Astaxanthin As Treatment of Glottal Dysplasia in A Vocal Professional: Potential Adjuvant Therapy?  
*Lucinda Halstead, M.D.*

## WEDNESDAY JUNE 2, 2021

WEDNESDAY, JUNE 2, 2021

AGENDA

10:55:00 AM - 11:10 AM DISCUSSION **LIVE**

11:10-12:15 Coffee Break

11:15a Respiratory Allergies and Food Intake in Artists During Pandemic  
*R. Eugenia Chávez, M.D., Ph.D.*

11:30a Voice Pathology in Professional Singers: Is It A Matter of Style?  
*Isobel García-López, M.D.*

11:45a Aerosol Emission in Singing – Influence of Vocal Loudness, Singers' Age and Voice Classification  
*Dirk Muerbe, M.D.*

12:00-12:15 DISCUSSION **LIVE**

12:15p Microsurgery for Benign Lesions in Performing Vocalists  
*Michael S. Benninger, M.D.*

12:30 My Last 2500 Operations Under General Anaesthesia- Complications, Trends and Pathways: A Personal Audit of My Database  
*John Rubin, M.D.*

12:45:00p - 13:00p DISCUSSION **LIVE**

1:00pm - 2:00pm Lunch

Chapters Meeting

### Provenance

*Much of what happens in history, I think, is due to the devoted and inspired contribution of single people.*

~ J Sundberg, PhD *Broadening the Circle*



THE VOICE  
FOUNDATION

200p Welcome  
*Robert T. Sataloff, M.D., Chairman, The Voice Foundation*

2:15p Anatomy and Physiology of Phonation: An Overview  
*Robert T. Sataloff, M.D., FACS*

3:00p Production and Perception of Voice: An Overview  
*NEURO – Charles Larson, Ph.D.*  
*RESPIRATION – Johan Sundberg, Ph.D.*

4:00p Coffee Break

4:30p Production and Perception of Voice: An Overview (cont.)  
*PHONATION – Ronald S. Scherer, Ph.D.*  
*RESPIRATION – Johan Sundberg, Ph.D.*  
*VOCAL TRACT – Sten Ternström, Ph.D.*  
*PERCEPTION – David Eddins, Ph.D.*  
*VOICE PEDAGOGY – William Riley, M.M.*

6:30p-7:00p **LIVE** Question and Answer **LIVE**

7:00p Adjourn

Care of the Professional Voice 2021

Page 4

## THURSDAY, JUNE 3, 2021

## War of the Words

*I would go to Jim Gould complaining, "This is hopeless. This is just hopeless.  
We can't even agree on a basic thing. We'll never get anywhere."  
And Jim would respond, in that calm, quiet, and deliberate way that he had:  
"We will learn to talk to each other."*

~ RJ Baken, PhD *Broadening the Circle*

Session I: Phonatory Modeling – Phonation Mechanics and Measures  
Chair: **Charles Larson, Ph.D.**

- 8:00a Control of The Pre-Phonatory Vocal Fold Posture in The Larynx Model Synthvoice  
*Stefan Kniesburges, Ph.D., Reinhard Veltrup, M.S., Matthias Echter-nach, M.D., Michael Döllinger, Ph.D., Anne Schützenberger, MD*
- 8:12a Computational Neuromuscular Control of Intrinsic Laryngeal Muscles for Voice Production  
*Anil Palaparthi, M.S., Rishi Alluri, Ph.D., Ingo Titze, Ph.D.*
- 8:24a Effect of Interferential Current Stimulation to The Neck on Vocalization in Guinea Pigs  
*Yoichiro, Sugiyama, M.D., Mami Kaneko, Ph.D.*
- 8:36a 3d-Printed Synthetic Vocal Fold Models  
*Scott L. Thomson Ph.D., Ryan G.T. Romero, M.S.*
- 8:48a-9:00a Panel DISCUSSION Moderator: Charles Larson, Ph.D. **LIVE**  
*Medical Panelist:  
Panel: Kniesburges, Palaparthi, Sugiyama, Thomson*

## Quintana Research Award Lecture 9:00am—9:30am

Chair: Robert T. Sataloff Ph.D.

## The Modeling of Vocal Fold Vibration for A Few Clinically-Related Conditions

*Jack Jiang, M.D., Ph.D.*

**Dr. Jack Jiang's** research is focused on the pathophysiology of voice. He is currently the Director of International Cooperative Research for the Dept. of Surgery and the Director of the Dept. of Otorhinolaryngology Bio-medical Engineering. Thus far, he has published 300 articles, with 7,000 citations and an h-index of 47. In 2002, Dr. Jiang won the Presidential Early Career Award for Scientists and Engineering. He is also a Fellow of the American Hearing and Speech Association (ASHA) and the American Laryngological Association (ALA).

After graduating from Shanghai First Medical College (now Fudan University Shanghai Medical College), he received his Ph.D. from the University

of Iowa where he studied under the direction of Ingo Titze. He has served as an associate professor of otolaryngology in the Dept. of Head and Neck Surgery at the Northwestern University School of Medicine. Since 2001, he has been a tenured professor with the Dept. of Surgery, Division of Otolaryngology at the University of Wisconsin School of Medicine and Public Health. He is currently an adjunct professor and director for the laryngology division at Fudan University.



9:30a Coffee Break

### Basic Science Session II (10:00am - 11:30pm)

#### Phonation Mechanics and Measures

Chair: Johan Sundberg, Ph.D.

- 10:00a Effect of Epilaryngeal Narrowing on The Peak Vocal Fold Contact Pressure During Phonation  
*Zhaoyan Zhang, Ph.D.*
- 10:12a Systematic Analysis of Phonation Modes in Singing Voice Using Glottal Source Features  
*Sudarsana Reddy Kadiri, Ph.D., Johan Sundberg, Ph.D., Paavo Alku, Ph.D.*
- 10:24a Post-Surgery Changes in Vocal Fold Closing Velocity in Patients with Mass Lesions  
*Hamzeh Ghasemzadeh, Ph.D., Dimitar D. Deliyski, Ph.D., Robert Hillman, M.D., Daryush D. Mehta, Ph.D., Katherine Abbott Verdolini, Ph.D.*
- 10:36a Glottal Attack Time and Glottal Offset Time Comparison Between Vocally Normal Speakers and Patients with Adductor Spasmodic Dysphonia During Connected Speech  
*Maryam Naghibolhosseini, Ph.D., Nicole Heinz, Corinne A. Brown, B.S., Farrah Levesque, High-School Student, Stephanie RC Zacharias, Ph.D., Dimitar D. Deliyski, Ph.D.,*
- 10:48a Closure of The Posterior Glottis during Singing: True or Not?  
*Claudio Storck, M.D., Jan Thommen, M.D., Florent Heritier, Fabian Unteregger, M.D., Flurin Honegger, Ph.D.*
- 11:00a- Panel DISCUSSION: Moderator Johan Sundberg, Ph.D. **LIVE**  
11:30a Panel: *Kniesburges, Palaparthi, Sugiyama, Thomson*

11:30p Lunch Break

*Meeting of Journal of Voice Editorial Board **LIVE ZOOM***  
Chair: Robert T. Sataloff (11:30 - 12:30p)

**THURSDAY, JUNE 3, 2021**

**Breath -- There Be Dragons**

*An important enduring mystery that cries out for resolution is the rules, if you will, of ventilatory control.*

~ RJ Baken, PhD *Broadening the Circle*

**Keynote Speech 1:00pm—2:00pm**

**On Vocal Loudness - *Ingo Titze, Ph.D.***

Dr. Ingo R. Titze has served as Director of the National Center for Voice and Speech since 1990, which is currently headquartered at the University of Utah. He is also a University of Iowa Foundation Distinguished Professor of Voice, Speech, and Vocal Music.



He has published 450 articles in scientific and educational journals. His book publications include *Principles of Voice Production* (1994), *The Myoelastic-Aerodynamic Theory of Phonation* (2006); in collaboration with Katherine Verdolini, *Vocology: The Science and Practice of Voice Habilitation* (2012); and *Fascinations with the Human Voice* (2010), which is printed in eight languages. His research interests include biomechanics of human tissues, acoustic phonetics, speech science, voice disorders, professional voice production, and the computer simulation of voice. His formal training is in Electrical Engineering (MS) and physics (Ph.D.).

Dr. Titze is a founding member and first elected President of the Pan-American Vocology Association. He has administered and taught in the SuM.M.er Vocology Institute, the premiere Vocology training program, for 18 years. His professional affiliations include the Acoustical Society of America, The National Association of Teachers of Singing, the American Speech Language Hearing Association, and the American Laryngological Association. Honors include The Gould Award for outstanding research in laryngeal physiology (1984), and the Silver Medal Award from the Acoustical Society of America (2007).

**Basic Science Sessions III (2:00pm - 3:30pm)**

**Voice Potpourri - High Speed Video, Perception, and Acoustic Measurement**  
**Chair: Ronald C. Scherer, Ph.D.**

2:00p External Validity of Calibrated Measurements from A Laser-Projection Transnasal Fiberoptic High-Speed Videoendoscopy System  
*Hamzeh Ghasemzadeh, Ph.D.*

2:12p Automated Glottis Obstruction Detection in High-Speed Videoendoscopy During Connected Speech for Patients with Adductor Spasmodic Dysphonia  
*Ahmed M. Yousef, M.Sc.*

## THURSDAY, JUNE 3, 2021

## THURSDAY, JUNE 3, 2021 AGENDA

- 2:24p Effects of Covarying Breathiness and Roughness on Dysphonia Severity in Natural Voices  
*Supraja Anand, Ph.D.,*
- 2:36p Depth of Endoscope Insertion into The Mouth: Deriving the Mouth-To-Microphone Distance for Reporting Sound Pressure Levels of Voice in Rigid Laryngoscopy  
*Jan G. Svec, Ph.D.,*
- 2:48p Generating Alternative Facts? - Bioacoustic Fundamental Frequency Estimation in A Well-Educated Gamble  
*Christian T. Herbst, Ph.D.,*
- 3:00p- Panel DISCUSSION: Ronald C. Scherer, Ph.D. **LIVE ZOOM**  
3:30p *Medical Panelist:*  
*Panel: Ghasemzadeh, Yousef, Anand, Svec, Herbst*

### Ripple Effect

*Almost anything in voice,  
if you scratch the surface hard enough and deep enough  
you'll find Jim [Gould] somewhere.  
~ J Rubin, MD Broadening the Circle*

### Poster Session (3:30pm - 5:00pm)

**Chair: Ronald C. Scherer, Ph.D.**

**Is an Aquatic Setting an Alternative Way to Deliver Speech Therapy in Patients With Bilateral Vocal Fold Nodules? A Retrospective Study**  
*Rita Alegria, SLP*

**Voice Therapy Delivered in A Water-Based Setting for Unilateral Vocal Fold Paralysis: A Case Report**  
*Rita Alegria, SLP*

**Use of A Vortex Whistle for Measures of Respiratory Capacity**  
*Shaheen N. Awan, Ph.D.,*

**Toward the Development of Vocal Injury Prevention Model: A Literature Review**  
*Arianna Basty, B.S.*

**The Control of Vibrato In "Crossover" Singers**  
*Alyssa Becker, M.M.*

**Vocal Health Education for Preservice Music Educators**  
*Susan Baker Brehm, Ph.D.,*

**Biomechanical Analysis of a Patient with Reinke's Edema Before and After Surgical Treatment. Case Report**  
*Isabel Cardoso, M.D.*

**Relationship Between Sleep and Stress with Voice Acoustic Parameters Among College Professors**  
*Andrés Carrillo-González, B.S.*

**THURSDAY, JUNE 3, 2021****Poster Session 3:30pm - 5:00pm****Evaluation of Factors Affecting Speech-Specific Quality of Life in Patients After Total Laryngectomy***Hiu Fung Chan, M.Sc.***Automated Quantification of Inflection Events in The Electroglottographic Signal***Juliana Codino, CCC-SLP, M.S.***Influence on Spectral Energy Distribution of Emotional Expression***Soledad Correa, M.D.,***Identifying the Impact of Vocal Hygienic Advice on The Voice of University Lecturers***Francesca D'Alessandro, B.A.***Relationship Between Vocal Symptoms and Vocal Handicap Index in University Professors***Gabriel Trevizani Depolli***Effect of Flow Phonation Voice Exercises on Vocal and Aerodynamic Measures in Undergraduate Student Singers***Jorge Andres Diaz, B.M.***Resonance Tube Therapy in Individuals with Parkinson's Disease: Clinical Trial***Ana Paula dos Santos, CCC-SLP, M.S.***The Relationship Between the Voice Handicap Index, The Voice-Related Quality of Life, And the Vocal Fatigue Index in Csd Graduate Students***Marina Englert, Ph.D.***Validation of The Acoustic Voice Quality Index and The Acoustic Breathiness Index in The Brazilian Portuguese***Marina Englert, Ph.D.***The Impact of Languages and Cultural Backgrounds on Voice Quality Analyses***Marco Fantini, M.D.***The Influence of Laryngeal Adductory Effort and Glottic Behavior on the Vibratory Mechanisms: An Exploratory Study***Leidy Lorena Forero Suárez, M.Sc.***Program for The Promotion of Vocal Health and Low Levels of Stress in The Workplaces of University Teachers.***Veronica Alexis Gonzalez, SLP, M.S.***Effects of A Voice Therapy Program for Male to Female Transgender Individuals***Mary Gorham-Rowan, Ph.D.***Training Audio-Perceptual Ratings: Effects on Rater Confidence***Renee Gottliebson, Ph.D.*

## THURSDAY, JUNE 3, 2021

### Poster Session 3:30pm - 5:00pm

#### **An Assessment of Different Praat Versions for Acoustic Measures Analyzed Automatically by Voicevalu8 And Manually by Two Raters**

*Jeremy Wolfberg, B.A.*

#### **An Assessment of Perceptual Measures Administered by Paper and Pencil and by the Voicevalu8 App**

*Brigit Corej*

#### **A New Vocal Tract Organ for Keyboard And/Or Multiple Performer Control**

*David Howard, Ph.D.*

#### **Realization of Vocalizzi as A Tool for Vocal Training and Therapy in Singers, through the Use of The Keyboard**

*Gonzalo Nicolas Inostroza - Moreno, SLP*

#### **Caring in Distance: Training Future Clinicians for Remote Voice Evaluation**

*Keiko Ishikawa, Ph.D., CCC-SLP, M.M.*

#### **Multi Sensorial Imagery Strategy for The Mix Voice Learning: A Preliminary Study with Female Singers**

*Maíra Dos Santos Jaber, M.M.,*

#### **Psychological and Daily Life Impacts of Sars-Cov-2 On the Transgender Non-Conforming CoM.M.unity**

*Hannah Laura Khorassani, B.S.*

#### **The Impact of Telehealth on Voice Therapy Attendance**

*Samantha Kridgen. M.S.*

#### **Discussion on The Safety of Endotracheal Intubation Anesthesia for Laryngeal with Small Inner Diameter in Anesthesia for Laryngeal Microsurgery**

*Yunyi Liu, Ph.D.*

#### **Using the Cape-V to Rate Roughness and Breathiness: Differences Among Expert Clinicians**

*Kathleen F. Nagle, Ph.D.,*

#### **Perceptual Discrimination of Pitch, Loudness and Overall Voice Severity In 6-To 8-Year-Old Children**

*Estella P.-M. Ma, Ph.D.*

#### **An Eclectic Voice Habilitation Program for Hyperfunctional Voice Disorders (Hfvd)– An Evaluation by Rct**

*Shenbagavalli Mahalingam, SLP*

#### **Behavioral Choices That Impact Vocal Fatigue**

*Monica McHenry, Ph.D.*

#### **Relationship Between Self-Efficacy and Reliability in Student Perception of Voice Quality Features**

*Mallory Aryn Meuser, B.S.*

#### **Activated Macrophages Immunoregulate Vocal Fold Fibroblasts Behaviour**

*Sepideh Mohammadi, M.Sc.*

THURSDAY, JUNE 3, 2021

**Poster Session 3:30pm - 5:00pm****Components of Healthcare Disparities for Voice and Upper Airway Disorders: A Theoretical Framework***Mariah E. Morton, CCC-SLP, M.S.***Immediate Effect of The Application of Transcutaneous Electrical Nerve Stimulation Associated with Vocal Exercises in Dysphonic Women***Gabriela Campos Moura, CCC-SLP***Voice Awareness Among Fitness Trainers in India Abstract***Priyanka Suresh Nayak, SLP***Analysis and Interpretation of Complex Vibrato Patterns: Deriving Novel Parameters of Variable and Irregular Vocal Vibrato***Theodora Ivanova Nestorova, M.M.***Effect of Mask and Face Shield on Voice and Speech Characteristics***Katia Ortiz, B.S.***Why Do Experts Disagree About the Vocal Physiology They Hear?***Polina Proutskova, Ph.D.***In Vitro Analysis of Polymeric Microspheres Containing Human Vocal Fold Fibroblasts for Vocal Fold Lamina Propria Regeneration***Alicia Reyes, M.Sc.***Real-World Audio Experiences Can Be Transparently Recreated in Virtual Reality***Florence May Roberts, M.Sc.***A Low-Cost Approach to Sound Intensity Calibration in Recording and Voice Acoustic Analysis***Marília Carvalho Sampaio, Ph.D., SLP***Maximum Phonation Time, Maximum Expiration Time, And The S/Z Ratio in Twins***Eugenia San Segundo, Ph.D.,***Vocal Acoustic Measurements Behavior in The Dermatoglyphic Profiles of Voice Professionals***Émile Rocha Santana, SLP, B.S., MPH***The Association Between Vocal Resonance and Vocal Quality***Émile Rocha Santana, SLP, B.S., MPH***Inflammatory Myofibroblastic Tumor of The Larynx: Report of A Case***Torunn Elise Sivesind, M.D.***Changes to The Female Singing Voice During Puberty: A Review of The Literature***Emily Sobieski, B.M.***Healthy Singing Practices: An Analysis of Body Mapping in Vocal Pedagogy***Sarah Katherine Stapleton*

**THURSDAY, JUNE 3, 2021**

**Poster Session 3:30pm - 5:00pm**

**Voice Fatigue and Changes After Increased Rate of Speech as A Vocal Loading Task**

*Lakshmi Maya Venkitachalam, SLP, M.A.*

**The Effect of Vocal Intensity Mode on Acoustic and Aerodynamic Measures in People with Parkinson's Disease**

*Christopher R. Watts, Ph.D.*

**The Effect of Bilingualism on The Voice of Spanish-English Bilingual Speakers**

*Josie Mia Webster, B.S.*

**Pre- and Post-Operative Voice Therapy: Factors Influencing A Complex Intervention**

*Anna Charlotte White, SLP, MCLinRes*

**Pre- and Post-Operative Voice Therapy for Benign Vocal Fold Lesions: A Systematic Scoping Review**

*Anna Charlotte White, SLP, MCLinRes*

**Evaluation of Graduate and Undergraduate Students' Ability to Detect Pathological Qualities and Assign Severity Ratings Using The GRBAS Scale**

*Anna Charlotte White, SLP, MCLinRes*

**The Effect of Face Masks on The Vocal Fatigue of Teachers**

*Judith, Maige Wingate, Ph.D.,*

**Virtual Exploration of The Human Vocal Tract**

*Daniel Ryan Michael Woods, M.Sci*

**Expression and Clinical Significance of Interleukin-10 (IL-10), Transforming Growth Factor B-1 (Tgf-B1) and Inducible Nitric Oxide Synthase (Inos) In the Process of Vocal Fold Leukoplakia Canceration**

*Yongjing You, Ph.D.*

**Efficacy of Straw Phonation in Prevention of Vocal Fatigue in Teachers**

*Crystal W.N. Yuen, M.S.T.*

**The Effect of Aural Modeling on Vowel Vs. Consonant Duration in Undergraduate Western Classical Singing**

*Dana Zenobi, D.M.A.*

**The Influence of Voice Training on Vocal Learners' Supraglottal Activities and Aerodynamic Evaluation**

*Peiyun Zhuang, M.D.*

**Students' Experience with Vocal Injury in Undergraduate Performing Arts Training Programs**

*Christine Suddeth, B.F.A.*

**Incidence of Lemg Findings for Vocal Fold Paresis in Voice Patients Who Play Wind Instruments, Either Past or Present**

*Valerie Trollinger, DME, Ghaith Alnouri, M.D.*

6:00p     Dinner (on your own)

THURSDAY, JUNE 3, 2021  
AGENDA

THURSDAY, JUNE 3, 2021

Fiberoptics~Getting Behind the Curtain

*Looking at the throat through the nose, with Gould's fiberoptic laryngoscope, was novel as you could look at the performer's throat without holding their tongue. That was a very big idea.*

~ P Woo, MD *Broadening the Circle*

Special Session (6:00pm - 7:30pm)

Singing - Singing - Registers, Acoustic Interactions, and Respiration

Chair: Johan Sundberg

6:00p Half A Century of Research on Singing-Voice Registers: Knowledge and Mysteries

*Nathalie Henrich Bernardoni, Ph.D.*

6:15p Breathing for Western-Classical Singing in Two Body Positions

*Peter J. Watson, Ph.D.*

6:30p Characterization of Source-Filter Interactions in Vocal Vibrato Using Neck-Surface Accelerometry

*Rosemary A. Lester-Smith, Ph.D.*

6:45p- Panel DISCUSSION: Moderator Johan Sundberg **LIVE ZOOM**

7:00p *Medical Panelist:*

*Panel: Bernardoni, Watson, Lester-Smith*

7:00p- Coffee Break

7:30p

THURSDAY, JUNE 3, 2021  
AGENDA

VAN L. LAWRENCE FELLOWSHIP

The Fellowship is open to members of the  
**National Association of Teachers of Singing**  
who are actively engaged in teaching,  
have demonstrated excellence in their profession  
as singing teachers, and have shown interest in  
and knowledge of voice science.

For more information contact  
[office@voicefoundation.org](mailto:office@voicefoundation.org)

**Deadline: November 15**

## THURSDAY, JUNE 3, 2021

## Speech-Language Pathology Session IA (7:30pm - 10:00pm)

**Chair: Elizabeth Heller Murray, Ph.D.**

- 7:30p     Aerosol Generation in Voice and Speech: A Systematic Review  
*Antonia Margarita Chacon, SLP*
- 7:40p     Respiratory Particle Emission During Voice Assessment and Therapy  
*Lauren TiM.M.ons Sund, M.D.*
- 7:50p     Developing Educational Health Modules to Improve Vocal Wellness in Mask-Wearing Occupational Voice Users  
*Victoria S. McKenna, Ph.D., Renee L. Gustin, CCC-SLP*
- 8:00p     Intelligibility in Auralized Classrooms: The Effect of Dysphonia  
*Pasquale Bottolicio, Ph.D.*
- 8:10p     Effect of Dysphonic Speech on Intelligibility in Primary Classrooms  
*Pasquale Bottolicio, Ph.D.*
- 8:20p     Impact of Pediatric Dysphonia on the Relationship Between Vocal Control and Articulatory-Vocal Coordination  
*Elizabeth Heller Murray, Ph.D.*
- 8:30p     Cognitive Mechanisms in Pediatric Voice Therapy  
*Hagar Feinstein, SLP*
- 8:40p     DISCUSSION **LIVE ZOOM**
- 8:50p     A Scoping Review of The Effectiveness of Voice Therapy to Treat Older Adults with Presbyphonia  
*Hyunhwa Lee, SLP*
- 9:00p     Physiological Effect of Voice Therapy for Aged Vocal Fold Atrophy Revealed with EMG Study  
*Mami Kaneko, Ph.D.*
- 9:10p     The Perception of Severe Vocal Dysphonia: Attractiveness Associated with Age  
*Francisco Contreras-Ruston, SLP*
- 9:20p     Listeners' Attitudes towards Young Women Using Glottal Fry  
*Nathalie Foulks, SLP*
- 9:30p     Beauty and Attractiveness in the Human Voice  
*Brian E. Petty, CCC-SLP*
- 9:40p - 9:50p     DISCUSSION **LIVE ZOOM**
- Adjourn

## THURSDAY, JUNE 3, 2021

### Speech-Language Pathology IB (7:30PM—10:00PM)

Chair: Nandhu Radhakrishnan, Ph.D.

- 7:30p The Sound of The Voice: An Interactive Play Between the Ears and the Eyes?  
*Kristiane Van Lierde, Ph.D.*
- 7:40p Exploring Novel Constructs of CoM.M.unicative Congruence and Dyspho-  
ria in The General Population  
*Brett Welch, CCC-SLP*
- 7:50p Development of Auditory-Perceptual Skills in Graduate Students  
Through Consistent Training  
*Maria Claudia Franca, Ph.D.*
- 8:00p ~~Comparison of Two Voice Therapy Models~~  
*Elizabeth Grillo, Ph.D.*
- 8:10p Similarities and Differences Across Voice Case History Questionnaires -  
A Scoping Review  
*Renee Krosch, B.AppSc*
- 8:20p The Relation Between Vocal Fatigue, Depressivity And Somatoform  
Disorders  
*Lydia Elaine Streppenbeck, MA*
- 8:30p Cortical and Acoustical Correlates of Vocal Clarity When Adopting to  
Internal Vs. External Focus of Attention  
*Ümit Daşdoğan, PostDip., MS. CF-SLP*
- 8:40p DISCUSSION **LIVE ZOOM**
- 8:50p ~~Voiced Whistle: A Novel Approach to Decrease Vocal Hyperfunction~~  
*Nandhu Radhakrishnan, Ph.D.*
- 9:00p Age and Gender Differences in Dutch Intonation  
*Evelien D'Haeseleer, Ph.D.*
- 9:10p Effects of Gargle Phonation in Patients with Muscle Tension Dysphonia  
*Diana Orbelo, Ph.D.*
- 9:20p Impaired Pitch Matching in A Professional Singer After Cochlear Implant:  
A Case Study  
*Leda Searce, CCC-SLP*
- 9:30p Gamification of Vocal Hygiene and Preventing Phonotrauma:  
Focusing on Hydration: A Qualitative Study  
*Julie Herrig, BA*
- 9:40p - 9:50p DISCUSSION **LIVE ZOOM**
- Adjourn

THURSDAY, JUNE 3, 2021  
AGENDA

FRIDAY, JUNE 4, 2021

## The Art of Laryngology~

*In medicine you have to remember the milk of human kindness,  
and how important humanism is in medicine.  
How important the holistic care of patients is.*  
~ F Brodnitz, MD    *Broadening the Circle*

## Special Session (8:00am - 12:00pm)

### Personality and the Voice

**Moderator: Nancy P. Solomon, Ph.D.**

- 8:00a    Personality: Voice Patients Are Full of It!  
*Nancy P. Solomon, Ph.D.*
- 8:10a    Models and Measures of Personality for Predicting Performance  
*Chris Patrick, Ph.D.*
- 8:40a    What's Personality Got To Do with Voice Disorders?  
Uncovering Neurobiological Mechanisms  
*Miriam van Mersbergen, Ph.D.*
- 9:00a    Just Relax!? Negotiating Stress for Vocal Well-Being  
*Maria Dietrich, Ph.D.*
- 9:30a    Coffee Break
- 10:00a    Personality in Children with Vocal Nodules: Why It Matters  
*Nelson Roy, Ph.D.*
- 10:30a    Both Speakers and Listeners Bring Personality to the  
Communication Table  
*Leah Helou, Ph.D.*
- 11:00a-12:00p    DISCUSSION **LIVE ZOOM**  
*Moderator: Nancy P. Solomon, Ph.D.*  
*Panel: Patrick, van Meersbergen, Dietrich, Roy, Helou*

12:00p    Lunch (on your own)

12:00p - 1:00p Advisory Board Meeting **LIVE ZOOM**  
**Chair: Michael M. Johns III, M.D.**

1:00pm - 2:00pm Voice Foundation Board of Directors Meeting **LIVE ZOOM**  
**Chair: Robert T. Sataloff, M.D.**

**FRIDAY, JUNE 4, 2021**

**Workshops Session I (1:30pm-2:25pm)**

FRIDAY, MAY 29, 2021  
AGENDA

**Singing Voice**

Inspiratory Muscle Training for the Voice Studio

*Rachel B. Goldenberg, D.M.A., Jessica DeMars, BSc*

SOVTraining: a Multidisciplinary Approach to Vocal Tract Semi-Occlusion  
for Voice Training

*Claudio Fabro, M.M., Vittoria Carlino, SLP, Marco Fantini, M.D.*

Watch Your Tongue! Insights into and Strategies on Tongue Physiology and  
Acoustic for the 21st Century Voice Studio

*Angelika Nair, Ph.D.*

**Musical Theater/Pop/Rock/CCM**

Singing Brazilian Jazz: A Better Understanding of the Vocal Style and the  
Brazilian Portuguese Pronunciation

*Maria Dos Santos Jaber, M.M.*

**Young Voices**

The Estill Adventure for Children: Figures for Beginners!

*Kimberly Steinhauer, Ph.D., Mary McDonald Klimek, CCC-SLP*

**Acting Voice**

Word Becomes Flesh: Acting Techniques for Rediscovering the Physical Nature  
of Language & Bringing Written Text to Life in Reading, Oratory, and  
Performance.

*Acacia Danielson*

**Voice and Movement**

The Empowering Role of Movement in Voice Pedagogy

*Joan Melton, Ph.D.*

Embodied Self Presence – Manual Voice Therapy

*Michele G. Fava, MS*

**Rehabilitation of the Injured Speaking Voice**

Aging Voice Therapy, Where does PhoRTE Fit?

*Edie Hapner, Ph.D., Aaron Ziegler, Ph.D.*

**Voice Science/Technology**

Cost-Effective Aerodynamic and Acoustic Measures for Singing Voice Education

*David Meyer, DM*

**FRIDAY, JUNE 4, 2021**

**Workshops Session II (2:30pm-3:25pm)**

**Acting Voice**

Stand your Ground and Expand - Acting Text  
*Janet Madelle Feindel, MFA*

**Musical Theater/Pop/Rock/CCM**

Retraction and Increased Resonance Strategies for Musical Theatre and CCM Singers  
*Ana Flavia Zuim, Ph.D.*

What is Authentic "Crossover" Singing?  
*Jeannette L. LoVetri*

**Singing Voice**

The Pedagogic Implications of Absolute Spectral Tone Color on Vowel Motivation and Modification  
*Kenneth Bozeman, M.M.*

Warm up with Whistle Training  
*Erika Biavati*

Let Diction Ring! Strategies for Effective Singer's Diction in the Studio, Classroom, and Choral Rehearsal  
*Brenda Smith, D.M.A.*

**Young Voices**

Correction of Children's Vocal Production Problems  
*Andrea Asztalos, Ph.D.*

**Rehabilitation of the Injured Speaking Voice**

Cricothyroid Visor Maneuver (CVM): A New Treatment Protocol for Muscle Tension Dysphonia  
*Ali Dehqan Ph.D., Kirrie J. Ballard Ph.D.*

Don't Scratch That Itch: Behavioral Management of Chronic Refractory Cough  
*Miranda Wright, CF-SLP, Brienne Hennessy, MS, CCC-SLP*

**Body Awareness and Voice**

Introduction to Mindfulness and Meditation  
*Carissa Maira, MS, CCC-SLP*

**FRIDAY, JUNE 4, 2021**

**Workshops Session III(3:30pm-4:25pm)**

**FRIDAY, MAY 29, 2021**  
**AGENDA**

**Singing Voice**

The Messa di Voce for Vernacular Styles

*Norman Spivey, D.M.A., Mary Saunders-Barton, MA*

The Tone Deaf Singer

*William Riley, M.M.*

**Transgender Voice**

Demystifying Resonance, Laughter, Throat Clearing and Coughing: Providing People Along the Gender Spectrum with the Tools to Play Their Vocal Instrument

*Sandy Hirsch, CCC-SLP*

**Musical Theater/Pop/Rock/CCM**

Supraglottic Extreme Voice Workshop

*Eleonora Bruni*

Twang as a Strategy for High Notes Production in CCM Singers

*Carolina Aviles Carolina Aviles*

**Young Voices**

Getting YOUNG Voices Going...

*Jeanne Goffi-Flynn, EdD*

**Body Awareness and Voice**

Yoga Used as a Development Tool for Breathing in Singing

*Laura de Souza, Ph.D.*

**Voice Science/Technology**

Real-Time Mapping of Phonation Across the Voice Range

*Sten Ternström, Ph.D.*

**Rehabilitation of the Injured Speaking Voice**

Cultivating A Supportive Presence: A Trauma-Informed Approach to Voice Care

*Megan Durham, M.M., Cert. SVS, RYT-200*

**Medical**

After Covid-19 - Intensive Functional Voice Treatment

*R. Eugenia Chavez, M.D., Ph.D.*

## FRIDAY, JUNE 4, 2021

## Workshops Session IV (4:25pm-5:30pm)

## Singing Voice

Restoring Balance Post Heavy Voice Load: Vocal Cool Down  
*Edrie Means Weekly, M.M.*

The Messa di Voce for Vernacular Styles  
*Catherine Pavlik, Ph.D.*

## Acting Voice

An Introduction to the Michael Chekhov Acting Technique: A Psychophysical Approach for the Singer-Actor  
*Katherine DeFiglio, D.M.A.*

## Body Awareness and Voice

Finding the Selftone through Qi Gong and Aikido  
*Tais Vieira, Ph.D.*

Introduction to Emotional Freedom Techniques: How Singers Can Use EFT Tapping for Self-Care and Emotional Regulation  
*Catherine Pavlik, Ph.D.*

## Musical Theater/Pop/Rock/CCM

Safe & Beautiful Belting Technique  
*Lisa Popeil, MFA*

Using Basic Phonatory Anatomy and Resonance Principles to Understand Gospel  
*Jason LeGrair, MS*

To Teach or Not to Teach: Strategies to Improve Your Extreme Vocals  
*Nicolás Hormazábal*

## Rehabilitation of the Injured Voice

Manual Therapy for Voice Disorders: Appreciating the Complexities of a Seemingly Simple Model  
*Walt Fritz, PT*

## Rehabilitation of the Injured Speaking Voice

Use of a Vortex Whistle for Measures of Respiratory Capacity and Control: Singing Voice  
*Shaheen Awan, Ph.D., Jordan Awan, MS*

FRIDAY, JUNE 4, 2021

Lecture (6:00pm-9:00pm)

6:00p-9:00p

Professional Voice: The Science and Art of Clinical Care  
*Robert T. Sataloff, M.D., D.M.A, F.A.C.S*

FRIDAY, MAY 29, 2021  
AGENDA

Visit our Educational Media Online

**Educational  
Resources**  
*for Professionals  
Patients  
The Public*

Past Tutorials, Lectures,  
StrobeOscars, Master Classes



## **NEW YORK SINGING TEACHERS ASSOCIATION**

*Educating Voice Professionals Worldwide Since 1906*

### **NYSTA Supports the Voice Foundation on its Fiftieth Anniversary Symposium.**

Available live in NYC and online worldwide, the New York Singing Teachers Association (NYSTA) offers its international membership events featuring leading figures in vocal performance, pedagogy, and health through the Great Coaches Series and Professional Development Program (PDP), as well as workshops, seminars, master classes and a peer-reviewed quarterly journal to inspire and educate those who work with the singing voice across all musical genres. Founded in 1906, NYSTA is the oldest singing teachers' association in the world. Join history! For more information about membership, professional development resources, and our scholarship program, please visit our website at

**[www.nyst.org](http://www.nyst.org)**

## SATURDAY, JUNE 5, 2021

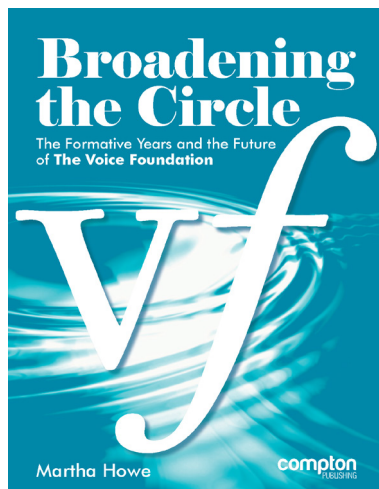
### Medical Session IA (8:00AM—9:30AM)

**Chair: Thomas Carroll, M.D.**

- 8:00a     Diagnosis and Analysis of Vocal Fold Movement Disorder Based on Deep Learning  
*Peiyun Zhuang, M.D.*
- 8:10a     Comparing Audio and Throat Accelerometer Signals as a Function of Subglottal Pressure in Different Phonation Types  
*Johan Sundberg, Ph.D.*
- 8:20a     Use of Surface Electromyography (SEMG) as a Diagnostic Measure of Muscle Tension Dysphonia: An Evidence-Based Systematic Review  
*Feifan Wang, Ph.D. Candidate*
- 8:30a     References Values for the Current Perception Threshold in the Pharynx Based on a Study of a Healthy Population  
*Wen Xu, M.D.*
- 8:40a     Treatment Outcomes of Benign Lesions of Vocal Fold in Children  
*Wen Xu, M.D.*
- 8:50a     Impact of Facial Mask on Auditory-Perceptual and Acoustic Characteristics of Voice and Speech – Preliminary Findings  
*Duong Nguyen, M.D., Ph.D.*
- 9:00a     ~~H2O2 Concentration in Exhaled Breath Condensate Increases After Phonotrauma: A Promise of Noninvasive Monitoring?~~  
~~*Marco Guzman, Ph.D.*~~
- 9:20a     DISCUSSION **LIVE ZOOM**

*"Here is a fascinating and illuminating chronicle of the development of the science and art of voice, told by the scientists, teachers, speech-language pathologists, otolaryngologists, and voice performers who have influenced – and continue to influence – this still-new and developing science built around the complexities of the human voice."*

Buy *Broadening the Circle* at  
[The Voice Foundation Online Store](#)



**SATURDAY, JUNE 5, 2021**

**Medical Session IB(8:00AM—9:30AM)**

**Chair: Ghiath Alnouri, M.D.**

- 8:00a Are There Differences in the Cranial Base of Humans and Apes?  
*Michael S. Benninger, M.D.*
- 8:10a Comparative Study of Acoustic Analysis of Tenors and Sopranos  
Classical and Non-Classical  
*Carlos Manzano, M.D.*
- 8:20a **(MOVED TO SESSION IA)** Normative Speech Data in Professional Opera  
Singers  
*Ghaith Alnouri, M.D.*
- 8:30a Surgical Outcome of Potassium-Titanyl-Phosphate (KTP) Laser  
Photocoagulation for Vocal Fold Vascular Lesions  
*Ghaith Alnouri, M.D.*
- 8:40a Short-Term Voice Improvement After Repeated Office Based Platelet  
Rich Plasma Injection in Patients with Scar Sulcus and Atrophy  
*Peak Woo, M.D.*
- 8:50a Impact of Stroboscopic Vocal Fold Scar Severity on Pre- and  
Post-Operative Voice  
*Swetha Vontela, BA*
- 9:00a The Effect of Marijuana on the Voice: A Pilot Study  
*Bailey Balouch, BS*
- 9:10a - 9:30a DISCUSSION **LIVE ZOOM**

9:30a Coffee Break

**LIVE ZOOM Panel (10:00AM—11:00AM) LIVE ZOOM**

**The Art of the Medicine:  
M.D. Performers Caring for the Singing Voice**

Moderator: Paul Kwak, M.D.

Panelists: Tom Carroll, M.D., Lesley Childs, M.D., Isabel Garcia-Lopez, M.D.,  
C. Kwang Sung, M.D., David Young, M.D.

SATURDAY, JUNE 5, 2021  
AGENDA

**SATURDAY, JUNE 5, 2021**

**Award Announcements (11:00AM—11:15AM)**

*Chair: Robert Thayer Sataloff, M.D., FACS*

- 30th Van Lawrence Fellowship Award
- JOV Best Paper Awards
- 13<sup>th</sup> Annual Sataloff Young Investigators Award
- 21<sup>st</sup> Annual David W. Brewer Award for Best Poster
- 15<sup>th</sup> Annual Journal of Voice Best Paper Awards
- 10<sup>th</sup> Annual Hamdan International Presentation Award
- 7<sup>th</sup> Annual Best Student Presentation Award
- 3<sup>rd</sup> Annual Spasmodic Dysphonia Research Award

**G. Paul Moore Lecture (11:15AM—12:15PM)**

***Brain Mechanisms Underlying Vocal Control***

***Charles Larson, Ph.D.***



Dr. Larson is a professor in the Department of Communication Sciences and Disorders at Northwestern University, a position he has held since 1981. In this position, he has taught courses on the Anatomy and Physiology of the Voice Production Mechanism, and in the area of Neurobiology. Dr. Larson's research has focused on neural

mechanisms involved in the control of the laryngeal system, voice and speech.

12:15p Lunch Break (on your own)

Presentation Outreach Committee Meeting **LIVE ZOOM**

Voice Lab Representatives Meeting **LIVE ZOOM**

Chair: Sten Ternström

**SATURDAY, JUNE 5, 2021**

**Panel (1:15PM—2:20PM)**

## **Meta Therapy: Beyond Vocal Hygiene and Exercise**

Moderator: Mara Behlau, Ph.D.

Does Treatment Choice Affect Adherence  
*Eva van Leer, Ph.D.*

Self-Control, Establishment of Goals and Impulse Control  
*Anna Alice Almeida, Ph.D.*

Optimizing the Clinician Style to Help the Patient to Adhere to Therapy  
*Kristiane Van Lierde, Ph.D.*

The Role of Mindfulness in Voice Therapy  
*Mary Sandage, Ph.D.*

2:08p - 2:20p **LIVE ZOOM** Roundtable DISCUSSION: Monitor Mara Behlau  
Panelists: van Leer, Almeida, Van Lierde, Sandage

SATURDAY, JUNE 5, 2021  
AGENDA

## **SALUTE TO OUR CHAPTERS**

**Atlanta, Alabama, Chicago,  
Greater Milwaukee, Houston Area,  
New England, North Carolina,  
North Texas, Northwest/Seattle,  
S. California, Western Wisconsin**

**Brazil, China, India,  
Japan, Lebanon, Mexico**

## SATURDAY, JUNE 5, 2021

## Seeing Sound

*We may be sorry that we didn't keep the original analog signals, because they contain more information and different information than we have in the digitized acoustical signal.*

~ RT Sataloff, MD, DMA    *Broadening the Circle*

## Speech-Language Pathology IIA (2:20PM—4:00PM)

Chair: Marco Guzman

- 2:20p**    **Evaluation of Voice Ability at Climacterium- (EVA-C)**  
*Filipa M. B. L. Lã, Ph.D.*
- 2:30p**    **Is There an Ideal Duration Time to Perform the Latex Tube?**  
*Mariana Ripari Bassetto*
- 2:40p**    **Immediate Effects of a Semi-Occluded Water-Resistance Ventilation Mask on Objective and Subjective Vocal Outcomes in Patients with Dysphonia**  
*Imke Kissel, M.Sc.*
- 2:50p**    **Immediate and Short-Term Effects of Straw Phonation in Air or Water on Vocal Fold Vibration and Supraglottic Activity of Laryngovideostroboscopy**  
*Iris Meerschman, Ph.D.*
- 3:00p**    **Immediate Effects of a Semi-Occluded Water-Resistance Ventilation Mask on Objective and Subjective Vocal Outcomes in Musical Theater Students**  
*Evelien d'Haeseleer, Ph.D.*
- 3:10p**    **A Voice Rehabilitation Protocol with the Semioccluded Ventilation Mask in Subjects with Symptoms of Vocal Fatigue and Phonatory Effort**  
*Carlos Calvache, M.Sc.*
- 3:20p**    **Cognitive Mechanisms in Pediatric Voice Therapy**  
*Hagar Feinstein, SLP*
- 3:30p**    **Expiratory Muscle Strength Training for Treatment of Chronic Cough**  
*Priya Krishna, M.D.*
- 3:40p**    **Phonation Resistance Training Exercises (PHORTE) With, and Without Expiratory Muscle Strength Training (EMST) For Patients With Presbyphonia: A Non-Inferiority Randomized Clinical Trial**  
*Michael A. Belsky, M.D.*
- 3:50p**    **DISCUSSION *LIVE ZOOM***
- 4:00p**    **Coffee Break   Exhibitors, Chats and Videos and Music**

## SATURDAY, JUNE 5, 2021

### Early Days

*As long as you don't know the facts,  
then you could replace arguments with emotions.*

~ J. Sundberg, PhD *Broadening the Circle*

### Speech-Language Pathology IIB (2:20PM—4:00PM)

Chair: Rosemary Lester-Smith

- 2:20p**     **SLP Session IIB Performance Evaluation of Subharmonic-to-Harmonic Ratio (SHR) Computation**  
*Christian Herbst, Ph.D.*
- 2:30p**     **In- Field Relative Fundamental Frequency via Neck-Surface Vibration in Patients with Vocal Hyperfunction and Vocally Healthy Controls**  
*Katherine L. Marks, CCC-SLP, MS*
- 2:40p**     **Does the Sound Extraction Method Affect Acoustic Measurement Results in PRAAT Program?**  
*Marilia Carvalho Sampaio, Ph.D., SLP*
- 2:50p**     **Differences and Reliability of Linear and Nonlinear Acoustic Measures as a Function of Vocal Intensity in Individuals with Voice Disorders**  
*Vanessa Florêncio, SLP, MS*
- 3:00p**     **Best Acoustic Measures to Discriminate Subjects with and without Vocal Quality Deviation**  
*Leonardo Lopes, Ph.D., SLP*
- 3:10p**     **Expiratory Muscle Strength Training for Treatment of Chronic Cough**  
*Ka Man Li, BA, MST*
- 3:20p**     **Characterization and Biomechanical Definition of the Phases of the Glottic Cycle in Voice Pathology Versus Normality Group**  
*Isabel Cardoso, M.D.*
- 3:30p**     **Description of Voice Production Pattern in Reinke's Edema Based on Biomechanical Analysis**  
*Isabel Cardoso, M.D.*
- 3:40p**     **Optimizing Acoustical and Perceptual Assessment of Vocal Tremor for Telepractice**  
*Rosemary A. Lester-Smith, Ph.D.*
- 3:50p**     **On-site Instrumental Evaluation and Short Customized Training in Professional Vocal Risk Surveillance. Proposal of a Method.**  
*Orietta Calcinoni, M.D.*
- 3:50p**     **DISCUSSION *LIVE ZOOM***
- 4:00p**     **Coffee Break Exhibitors, Chats and Videos and Music**

**SATURDAY, JUNE 5, 2021**

## Educating Each Other

*The primary aspect of the Symposia that has changed over the many years is that the education and the knowledge base of all the attendees is so much broader and deeper now.*

~RC Scherer, PhD    *Broadening the Circle*

## Speech-Language Pathology IIA (4:30PM-6:30PM)

**Chair: Evelien d'Haeseleer**

- 4:30p    Acoustic, Aerodynamic, Morphometric, And Perceptual Changes During and After Semi-Occluded Vocal Tract Exercise: An Integrative Review  
*Christopher Apfelbach, CCC-SLP*
- 4:40p    Tissue Mobilization During Double Source of Vibration Semioccluded Vocal Tract Exercises: A Neck and Face-Surface Acceleration Study  
*Marco Guzman, Ph.D.*
- 4:50p    Clinician and Gender-Expansive Consumer Perspectives on Gender-Affirming Voice Services  
*Dominic Moog, B.A.*
- 5:00p    Identity as a Factor in Voice Disorders and Voice Concerns  
*Marianna Rubino, CCC-SLP*
- 5:10p    The Glottal Gap Phenomenon. A Limitation for Female Vocal Performance?  
*Kristiane Van Lierde, Ph.D.*
- 5:20p    The Role of Vocal Production in Performance of Gender Identities  
*Samantha Rieches, B.S.*
- 5:30p    Voice Change in Transgender Individuals: A Preliminary Study  
*Afua M. Agyapong, Ph.D.*
- 5:40p    Conversation Training Therapy to Target Voice and Communication for Trans Women  
*Mitchell Peck Eng, B.S.*
- 5:50p    Pitch Biofeedback with A Smartphone for Transgender Women: A Pilot Study  
*Clara Leyns, SLP*
- 6:00p    Preferences for Gender-Affirming Voice Modification Clinicians  
*Desi Gutierrez, B.A.*
- 6:10p    Voice Changes in Transmasculine Individuals Following Circumalaryngeal Massage and Laryngeal Reposturing  
*Kimberly Dahl, CCC-SLP*
- 6:20p    DISCUSSION **LIVE ZOOM**
- 6:30p    DINNER

**SATURDAY, JUNE 5, 2021**

**Speech-Language Pathology IIB (4:30PM-6:30PM)**

**Chair: Christine Murphy Estes**

- 4:30p Vocal Loading in Speech Language Therapists Assessing Aerodynamic Parameters – A Comparative Study  
*Usha Manjunatha, CCC-SLP*
- 4:40p Auditory Skills as a Predictor of Rater Reliability and Accuracy in the Evaluation of Vocal Quality  
*Leonardo Lopes, Ph.D.*
- 4:50p Objective Assessment of Tonicity of Neck, Facial, Suprahyoid, and Infrahyoid Muscles and Body Posture in Subjects Diagnosed with Voice Disorders and Normal Voices  
*Karol Acevedo, SLP*
- 5:00p Relationship between the Ability to Perceive Frequency Patterns and the Expressiveness of TV Journalists: Preliminary Study  
*Ingrid Gielow, Ph.D.*
- 5:10p The Effect of Sound Field Amplification Systems on Vocal Dose in Teachers  
*Baiba Trinite, Ph.D.*
- 5:20p ~~Vocal Tract Discomfort of University Professors According to Self-Reference of Vocal Symptoms~~  
*Michelle Ferriera Guimarães, Ph.D.*
- 5:30p Fitness Instruction and Vocal Function: Synthesizing Scientific Literature Across Multiple Disciplines to Inform Clinical Practice  
*Anumitha Venkatraman, CCC-SLP*
- 5:40p Performers' Perceptions of Voice Change with Oral Steroid Treatment of Vocal Fold Edema  
*Christine Murphy Estes, M.M.*
- 5:50p Socio-Economic Consequences of Voice Disorders, Sleep Problems, and Work-related Stress among College Professors  
*Bibiana Omaira Rute Sanabria, M.Sc., Lady Catherine Cantor Cutiva, PhD*
- 6:00p Self-reported Voice Concerns in a Nonclinical Sample of Military Service Members  
*Trevor Thomas Perry, Ph.D.*
- 6:10p- 6:30p DISCUSSION **LIVE ZOOM**
- 6:30p DINNER

**8:00p West Coast Happy Hour Social (All are welcome!)**

**SATURDAY, JUNE 5, 2021**  
**AGENDA**

## SUNDAY, JUNE 6, 2021

### A Surgical Specialty

*Dr. Hirano's research on the layered structure of the vocal fold was revolutionary as well as Dr. Gray's basement membrane research. That was really groundbreaking...the laryngeal and phonosurgeries have changed based on a lot of the research from our scientists.*

*~ M Hawkshaw, RN, CORLN    Broadening the Circle*

### Medical Session IIA (8:00AM—9:40AM)

Chair: Denis Lafreniere, M.D.

- 8:00a    Safe Medical and Therapeutic Evaluation of Voice Patients during the Covid Pandemic  
*Denis Lafreniere, M.D.*
- 8:10a    Otolaryngology-related Google Search Trends during the Covid-19 Pandemic  
*Matthew Pier, B.S., Ghaith Alnouri, M.D.*
- 8:20a    Singing during the Pandemic: Impulse Dispersion of Aerosols  
*Matthias Echternach, M.D.*
- 8:30a    Influence of Loudness and Pitch on Supraglottic Hyperfunction in Female Subjects with Dysphonia and Normal Voice  
*Rosario Uribe, SLP*
- 8:40a    "Chip of Beauty" and Voice Changes  
*Andrea Maria Campagnolo, M.D., Michael Benninger, M.D.*
- 8:50a    Laryngopharyngeal Reflux Symptoms, Dysphonia and Vocal Tract Discomfort in Non-Professional (Amateur) Choir Singers  
*Carlo Robotti, M.D.*
- 9:00a    The Relationship between Chronic Cough and Laryngopharyngeal Reflux  
*Gaith Alnouri, M.D.*
- 9:10a    The Role of Spectral and Temporal Features in the Intelligibility Advantage of Twang Voice in Noise  
*Keiko Ishikawa, Ph.D., CCC-SLP, M.M.*
- 9:20a    Polypoid Degeneration in Turbinates and Vocal Folds Due to Respiratory Allergies and their Treatment  
*R. Eugenia Chavez, M.D., Ph.D.*
- 9:30a-9:40a    Q&A    DISCUSSION **LIVE ZOOM**

SUNDAY, JUNE 6, 2021

## Philadelphia

*The Symposia foster cross disciplinary understanding, collaboration, deeper thinking about one's own questions, and long-term friendships that stimulate future harmony within the professions.*

~ RC Scherer, PhD *Broadening the Circle*

### Medical Session IIB(8:00AM—9:40PM)

Chair: Mausumi Natalie Syamal, M.D., M.S.

- 8:00 AM Vocal Fold Paresis and Voice Outcomes Following Vocal Fold Mass Excision  
*Ghiath Alnouri, M.D., Robert T. Sataloff, M.D., Samantha Frank, M.D.,*
- 8:10 AM Influence of Reduced Saliva Production on Phonation in Patients with Ectodermal Dysplasia  
*Marion SeM.M.ler, Ph.D.*
- 8:20 AM Laryngeal Aerodynamics Analysis of Spasmodic Dysphonia  
*Xinlin Xu, M.D.*
- 8:30 AM Initial Data on Long-Term Effects of Vibro-Tactile Stimulation in People with Spasmodic Dysphonia  
*Divya Bhaskaran, Ph.D., M.Sc.*
- 8:40 AM Unusual Disease Course of Abductor Spasmodic Dysphonia  
*Jared Alexander Sperling, M.S.*
- 8:50 AM Factors Influencing Pursuit of Botulinum Toxin Injection for Laryngeal Dystonia Patients  
*Mausumi Natalie Syamal, M.D., M.S.*
- 9:00 AM Botox Injection to the Lateral Cricoarytenoid Muscle in a Transgender Woman with Tremor: A Case Study  
*Patrick Timothy Kiessling*
- 9:10 AM Paradoxical Vocal Fold Movement: A Retrospective Analysis  
*Ghiath Alnouri, M.D.*
- 9:20 AM Why Has My Upper Register Disappeared? Prevalence of Voice Problems in Popsingers and Other Semiprofessional Voice Users  
*Josef Schlömacher-Thier, M.D., SLP*
- 9:30 AM - 9:40 AM Q&A DISCUSSION **LIVE ZOOM**
- 9:40 - 10:10AM Coffee Break

SUNDAY, JUNE 6, 2021  
AGENDA

## SUNDAY, JUNE 6, 2021

## Panel (10:10AM—11:20AM)

**The Amateur Choral Singer as Patient**

Moderator: Brenda Smith, D.M.A.

Panelists: Karen Brunssen, BM, Linda Carroll, Ph.D., Allen Henderson, D.M.A., Robert T. Sataloff, M.D.

11:10a - 11:20a Q&A DISCUSSION **LIVE ZOOM**

## Panel (11:20AM—12:30PM)

**From Undergrad to D.M.A.:  
The Path to Informed Voice Pedagogy**

Moderator: Allen Henderson, D.M.A.

Introduction

Framing the Conversation around Voice Pedagogy  
*Lynn Holding, M.M.*

The Knowledge Explosion and its Impacts  
*Ian Howell, D.M.A. and Kari Ragan, D.M.A.*

Voice Pedagogy in the Real World  
*Allen Henderson, D.M.A., NATS*

Teaching Pedagogy Moving Forward  
*Amelia Rollings Bigler, Ph.D.*

12:20 - 12:30p Q & A DISCUSSION **LIVE ZOOM**

## VAN L. LAWRENCE FELLOWSHIP

The Fellowship is open to members of the  
**National Association of Teachers of Singing**  
who are actively engaged in teaching,  
have demonstrated excellence in their profession  
as singing teachers, and have shown interest in  
and knowledge of voice science.

For more information contact  
[office@voicefoundation.org](mailto:office@voicefoundation.org)

**Deadline: November 15**

**SUNDAY, JUNE 6, 2021**

### **Greater Resolution and Precision**

*I would say that the science of voice has moved forward  
because of greater resolution in time, greater resolution in space  
(whether that space is outside the tissue or inside the tissue),  
and greater precision in surgical procedures.  
Those are great advancements, plus the improved training  
of practitioners in the various disciplines of voice.  
~RC Scherer, PhD Broadening the Circle*

**SUNDAY, JUNE 6, 2021**  
**AGENDA**

12:30p-1:30p Lunch Break

Symposium Planning Committee Meeting **LIVE ZOOM**

### **Voice Pedagogy IA (1:30PM—3:10PM)**

**Chair: Wendy LeBorgne, Ph.D.**

- 1:30p In-Person or Virtual? – Assessing the Impact of Covid-19 on the Teaching Habits of Voice Pedagogues  
*Kristen Murdaugh, M.M.*
- 1:40p Long-Term Impact of Covid-19 On Singing Teachers  
*Wendy LeBorgne, Ph.D.*
- 1:50p Emotional Safety in The Voice Studio  
*Elizabeth Ann Benson, D.M.A.*
- 2:00p Knowledge, Attitude and Practices of Indian Classical Singers towards Vocal Health Care  
*Dhanshree Rajesh Gunjawate, Ph.D.*
- 2:10p The Manifestation of Vocal Fatigue: A Survey of Professional, Female Opera Singers and a Single-Subject Study of One Professional Opera Singer  
*Melissa Treinkman, D.M.A.*
- 2:20p Best Virtual Practices: Teaching in the Time of Covid-19  
*Sarah Katherine Stapleton*
- 2:30p How Does Being A Singer Affect the Way We Treat Singers?  
*Lance Maron, M.D.*
- 2:40p The Physiological Correlates of Multiple Different Sound Colours Across Multiple Phonation Types as An Alternative To 'A Timbre'  
*Mathias Aaen, Ph.D.*
- 2:50p Characteristics of The Vocal Function Resulting from The Use of a Feminized Voice in Trans Women  
*Triana Macarena Aguirre, B.M.*

3:00p-3:10p DISCUSSION **LIVE ZOOM**

*Care of the Professional Voice 2021*

*Page 33*

## SUNDAY, JUNE 6, 2021

### Balance of Culture and Science

*There were very heated discussions between the Ph.D. doctors and the M.D. doctors. There were all kinds of arguments about everything, and sometimes it was like a tennis match watching the arguments! There was a lot of discord between the scientists and the singing teachers.*

*...Sometimes the fur would fly at the symposium. but gradually, as the younger singing teachers came in, some of that argument diminished.*

~J. LoVetri *Broadening the Circle*

### Voice Pedagogy IB(1:20PM—3:10PM)

**Chair: Edrie Means Weekly, M.M.**

- 1:20p Contemporary Commercial Music (CCM) Survey: Current State of Who's Teaching What In Non-Classical Music  
*Edrie Means Weekly, M.M.*
- 1:30p Health Seeking Behaviors of CCM Performers  
*Ana Flavia Zuim, Ph.D.*
- 1:40p Broadway Baby: A Vibrato or Conscious Wobble?  
*Daniel A. Lyng*
- 1:50p Acoustic and Perceptual Qualities of Music Theater Mix in Four Professional Singers  
*Brian Michael Manternach, D.M.A.*
- 2:00p Vocal Habits and Behaviors of Contemporary Christian Music Professional Singers In Brazil  
*Maria Dos Santos Jaber, M.M.*
- 2:10p The Upper Vocal Tract Contribution on The Auditory Perception of Twang  
*Marcelo Saldias O'Hrens, SLP*
- 2:20p Vocal Health of Choral Singers from Kenya And the United States: Dysphonia and Vocal Fatigue in Relation to Musical Genres  
*Morgan Jolley, Ph.D.*
- 2:30p The Influence of Vowels On A Cappella Choral Tuning  
*David Howard, Ph.D.*
- 2:40p Measuring "Lock and Ring" In Barbershop Singing  
*Peter James Cookson, Ph.D.*
- 2:50p The Singing Voice Specialist: An Essential Bridge Between Two Worlds  
*Rebecca Holbrook Loar, D.M.A.*
- 3:00p DISCUSSION **LIVE ZOOM**

**SUNDAY, JUNE 6, 2021**

**Voice Pedagogy IA (3:10PM—5:30PM)**

**Chair: David Meyer, D.M.**

- 3:10p Exogenous Testosterone and The Transgender Singing Voice  
*Ari Agha, Ph.D.*
- 3:20p Fundamentally Speaking (And Singing): A Longitudinal Single-Case Study of a Professional Transmasculine Singer During Hormone Replacement Therapy  
*Felix A. Graham, Ph.D.*
- 3:30p Acoustic and Airflow Vibrato in Diatonic Scales: A Pilot Study  
*Sri Nandamudi, Ph.D.*
- 3:40p Extreme Vocal Effects as Measured by Acoustics and Egg - An Investigation of Distortion, Growl, Grunt, And Rattle  
*Mathias Aaen, Ph.D.*
- 3:50p Supraglottal Pressure Modeling in Excised Canine Larynges  
*Nikita Menon, B.S.*
- 4:00p Sung Vowel Clarity with Respect to Pitch Distribution in Recitative and Aria  
*David Howard, Ph.D.*
- 4:10p Effects of Historical Wax Cylinder Recording Technology on Spectral Measurements of Treble Operatic Singer Chest Voice  
*Joshua D. Glasner, Ph.D.*
- 4:20p Comparison of The Effects of The Nares and Nasal Cavity on Voice Quality Versus Vocal Tract Adjustments  
*Aramat Arnheim-Sharon*
- 4:30p Effects of Provoz Training in The CoM.M.unicative Skills of Young People  
*Maria Lucia Graziano Magalhães, M.Sc.*
- 4:40p Resonant Voice: Perceptual and Acoustic Analysis After Lessac's Kinesensic Training  
*Marilene Grama, SLP*
- 4:50p Interpretative Map: A Pedagogical Tool to Enhance Vocal Interpretive Ability In Acting Students  
*Gala Fernandez, M.A.*
- 5:00p DISCUSSION **LIVE ZOOM**
- 5:10p Adjourn
- 6:00pm - 7:30pm NATS Voice Science Advisory Committee Meeting

SUNDAY, JUNE 6, 2021  
AGENDA

## SUNDAY, JUNE 6, 2021

### Voice Pedagogy IB(3:10PM—5:30PM)

**Chair: Rachelle Fleming, D.M.A.**

- 3:10p     Singing and Persons with Physical Disabilities: A Survey of Singing Teacher Attitudes, Knowledge and Experience  
*Julieta Garcia Reyes, M.M.*
- 3:20p     Pedagogical Education of The Current Voice Teacher Population  
*Rachelle Fleming, D.M.A.*
- 3:30p     The Impact of Inspiratory Muscle Training and Breathing Exercises on the Inspiratory Muscle Strength, Maximum Phonation Time and Range of Singers and Non-Singers  
*Rachel B. Goldenberg, D.M.A.*
- 3:40p     Speak Like You Sing: Integrating Classical Techniques from Theatre and Music in Spoken Dialogue for Opera  
*Joan Melton, Ph.D.*
- 3:50p     The Influence of Voice Training on Vocal Learner's Objective Acoustic Voice Components  
*Peiyun Zhuang, M.D.*
- 4:00p     Singing at Menopause: A Systematic Review  
*Mauro Barro Fiuza, M.S.*
- 4:10p     Teacher Attitudes on Vibrato Use in Early Vocal Music  
*Margaret Wolfe, M.M.*
- 4:20p     The Effect of Formant Tuning on Intonation Perception  
*Daniel Andrew Lying, M.M.*
- 4:30p     The Key to Singing Off-Key: The Amplified Singer and Pitch Perception Distortion  
*Sarah Kervin, M.M., M.S.*
- 4:40p     Quantitative Analysis of The G. Schirmer Opera Anthologies Edited by Robert Larsen  
*James D. Rodriguez, D.M.A.*
- 4:50p     Synthesizing Schubert: Quantitative Analysis of Die Schöne Müllerin  
*Paul Patinka, M.M.*
- 5:00p     Putting the Human Touch in Your AI Voice  
*Allison Smith, B.F.A.*
- 5:10p     DISCUSSION **LIVE ZOOM**
- 5:20p     Adjourn
- 6:00pm - 7:30pm     NATS Voice Science Advisory Committee Meeting

## Meetings

### Wednesday, June 2

Quintana Award Committee 12:00 PM - 1:00 PM

Voice Foundation Local Chapters 1:00 PM - 2:00 PM

### Thursday, June 3

Quintana Award Committee

Journal of Voice Editorial Board  
11:30 - 12:30 PM

### Saturday, June 5

Voice Laboratory Representatives  
12:15 - 1:15pm

Presentation Outreach Committee  
12:15pm - 1:15pm

### Friday, June 4

TVF Advisory Board  
12:00 PM - 1:00 PM

TVF Board of Directors  
1:00 PM - 2:00 PM

### Sunday, June 6

Symposium Planning Committee  
12:30pm - 1:30pm

NATS Voice Science Advisory  
6:00pm - 7:30pm

# CONGRATULATIONS

The Editorial Board of the Journal of Voice  
is proud to announce the 2020 Best Paper Awards

Access to these articles is gratis for the next six months at [jvoice.org](http://jvoice.org)  
Basic Science

[Visual and Automatic Evaluation of Vocal Fold Mucosal Waves Through Sharpness of Lateral Peaks in High-Speed Videokymographic Images](#)

S. Pravin Kumar, Ketaki Vasant Phadke, Jitka Vydrová, Adam Novozámský, Aleš Zita, Barbara Zitová, Jan G. Švec  
Vol. 34, Issue 2, p170–178

Clinical Medicine

[Efficacy of Videostroboscopy and High-Speed Videolaryngoscopy to Obtain Functional Outcomes From Perioperative Ratings in Patients With Vocal Fold Mass Lesions](#)

Maria E. Powell, Dimitar D. Deliyiski, Steven M. Zeitels, James A. Burns, Robert E. Hillman, Terri Treman Gerlach, Daryush D. Mehta  
Vol. 34, Issue 5, p769–782

SLP/Vocal Ped

[Voice Therapy Outcome—A Randomized Clinical Trial Comparing Individual Voice Therapy, Therapy in Group, and Controls Without Therapy](#)

Ann-Christine Ohlsson, Hans Dotevall, Inger Gustavsson, Kerstin Hofling, Ulrika Wahle, Claes Österlind  
Vol. 34, Issue 2, p303.e17–303.e26  
Full-Text HTMLPDFSupplemental Materials

Journal of Voice is published by Elsevier for The Voice Foundation and International Association of Phonosurgery.  
Elsevier

JOURNAL OF VOICE is included in [The Voice Foundation Professional Membership](#).



# THE VOICE FOUNDATION

Dear Voice Foundation Friends and Family:

## Thank You

## Stay Safe Stay Healthy

We want to see you  
IN PERSON JUNE 1 - 5, 2022  
The Philadelphia Westin  
for the 51st Annual Symposium:  
CARE OF THE PROFESSIONAL VOICE

### Balance of Culture and Science

*Voice is the one door that takes you to the arts and takes you to medicine.*

*I went to voice because it was the one possibility  
of making me balance culture and science.*

*~ M. Behlau, PhD    Broadening the Circle*