

FINAL PROGRAM

Monday, March 14		Tuesday, March 15		Wednesday, March 16		Thursday, March 17						
Short Courses												
8:00 - 8:20	Registration		Welcome remarks and conference information: (Matias Zaňartu, PhD)		Keynote talk: Where has all the power gone? Accounting for energy creation and loss in vocalization (Ingo Titze, PhD)		34. Dynamic vocal fold imaging with combined optical coherence tomography/laryngeal high-speed video endoscopy (Nicusor Iftimia, PhD)					
8:20 - 8:40			Keynote talk: Modeling of vocal fold vibration (Jack Jiang, MD, PhD)		19. Highly resolved temporal analysis of the flow field in a synthetic human larynx model (Alexander Lodermeier, Mr)		35. Potential of endoscopic high speed imaging – current projects (Michael Döllinger, PhD)					
8:40 - 9:00			1. From in silico to in vivo: Applying Simulation to Laryngeal Surgery Planning (Ted Mau, MD, PhD)		20. Subharmonic tone generation in an artificial vocal fold model (Stefan Kniesburges, PhD)		36. Analysis of spatial characteristics of the larynx using high-speed digital imaging (Ken - Ichi Sakakibara, PhD)					
9:00 - 9:20	Short Course 1, Part 1: Objective measurements of vocal fold vibration and phonatory function Jack Jiang, MD, PhD	Short Course 2, Part 1: From basic science to clinical application Michael Döllinger, PhD	2. Surgical Modeling Using Dynamic Voice CT to Improve Voice Post Airway Reconstruction (Alessandro De Alarcon, MD)	21. Intraglottal Vortices During Phonation (Sid Khosla, MD)	22. Simulations of Vocal Fold Replicas Containing Liquid-Filled Cavities (Scott Thomson, PhD)	23. Computational Modeling of Flow-Structure-Acoustic Interaction inside a Simplified Airway during Voice Production (Xudong Zheng, PhD)	37. Cross Sectional Imaging of Phonating Human Vocal Fold in Vivo Using VCSEL Optical Coherence Tomography (Brian J. F. Wong, MD, PhD)					
9:20 - 9:40			3. Comparing arytenoid adduction and infraglottal medialization to glottal medialization alone in an excised canine larynx model (Sid Khosla, MD)	24. Dynamic and energetic relevance of glottal jet asymmetry (Lucy Zhang, PhD)	25. Rethinking vocal fold contact: The role of viscous dissipation (Byron Erath, PhD)	26. Assessing the influence of intraglottal vortices on vocal fold dynamic (Sean Peterson, PhD)	38. Analysis of connected speech using high-speed videoendoscopy (Dimitar Delyski, PhD)					
9:40 - 10:00			4. Using the in vivo canine model to assess and treat laryngeal disorders (Dinesh Chetri, PhD)	27. The effect of vocal fold superior-inferior stiffness variation on sound production (Qian Xue, PhD)	28. Experimental study of the influence of a growth on a replica of the vocal folds (Xavier Pelorson, PhD)	29. Hysteresis and Relaxation of Vocal Fold Tissue and the Difference between Phonation Onset and Offset (Lewis Fulcher, PhD)	30. An Empirical Equation for Posterior Glottal Flow (Ronald Scherer, PhD)	39. Vocal fold oscillation patterns in soprano singers' high fundamental frequency phonation (Matthias Echternach, PhD)				
10:00 - 10:20			5. Modeling voice production with time-delay systems: the larynx tube (Denisse Sciamarella, PhD)		6. Modeling the pathophysiology of vocal hyperfunction (Matias Zaňartu, PhD)	7. Broadband synchronization of asymmetric vocal fold oscillators (Jorge Lucero, PhD)	8. Predicting Achievable Fundamental Frequency ranges in Vocalization Across Species (Ingo Titze, PhD)	9. Generation of diphthongs using finite elements in three-dimensional simplified vocal tracts (Marc Arnela, PhD)	40. A new method to present high-speed data for laryngeal assessment based on Optical Flow computation (Gustavo Andrade, PhD)			
Coffe Break												
10:20 - 10:40	Short Course 1, Part 2: Objective measurements of vocal fold vibration and phonatory function Jack Jiang, MD, PhD		Short Course 2, Part 2: From basic science to clinical application Michael Döllinger, PhD		41. The Impact of Glottal Closure on Speech Breathing (Elizabeth Heller Murray MS, SLP)		42. Vocal fold opening and closing phase differences in children with and without bilateral lesions (Stephanie Zacharias, PhD)					
10:40 - 11:00					43. Center of Vocal Fold Vibration during Initiation and Termination Phases (Melda Kunduk, PhD)		44. Computerized tomography measures during and after artificial lengthening of the vocal tract in subjects with voice disorders (Marco Guzman, SPL)		45. Comparison of supraglottic activity and spectral slope between theater actors and vocally untrained subjects (Felipe Quintana Barahona, SPL)			
11:00 - 11:20					46. Simulations of child-like speech as test material for speech analysis algorithms (Brad Story, PhD)		47. Effectiveness of recurrence quantification measures in discriminating patients with and without voice disorders (Leonardo Lopes, PhD)		48. Discriminating patients with vocal fold nodules from matched controls using acoustic and aerodynamic features from ambulatory voice monitoring data (Juan Pablo Cortés, MS)			
11:20 - 11:40					49. Constructing a subject-specific lumped-mass model from clinical data using Bayesian estimation (Gabriel Galindo, PhD-C)		50. Phonation Type as a Function of the Activation of the Intrinsic Laryngeal Muscles (David Berry, PhD)		51. Relative Fundamental Frequency Distinguishes Between Phonotraumatic and Non-Phonotraumatic Vocal Hyperfunction (Cara Stepp, PhD)			
11:40 - 12:00					52. The Role of the Epirarynx in Clear Speech Production: An Acoustic Analysis (Elizabeth Godoy, PhD)		53. Vocal fold contact pressure estimation using laryngeal high speed videoendoscopy (Manuel Diaz Cadiz, MS)		54. Phonation energy utilization and efficiency (Michael McPhail, PhD)			
12:00 - 12:20	55. Potential of endoscopic high speed imaging – current projects (Michael Döllinger, PhD)		56. Analysis of spatial characteristics of the larynx using high-speed digital imaging (Ken - Ichi Sakakibara, PhD)		57. Cross Sectional Imaging of Phonating Human Vocal Fold in Vivo Using VCSEL Optical Coherence Tomography (Brian J. F. Wong, MD, PhD)		58. Analysis of connected speech using high-speed videoendoscopy (Dimitar Delyski, PhD)					
Lunch Break												
12:20 - 14:00	Short Course 3, Part 1: Using computer models to validate therapy and surgery approaches Ingo Titze, PhD		Short Course 4, Part 1: Tissue engineering of the human vocal folds Luc Mongeau, PhD		Keynote talk: Influence of phonation-related stresses on vocal fold reconstruction (Luc Mongeau, PhD)		Keynote talk: Interdisciplinary voice research: The whole is more than the sum of its parts (Michael Döllinger, PhD)					
14:00 - 14:20					10. Sensitivity Analysis of Agent-Based Model of Vocal Fold Inflammation and Repair (Nicole Li, PhD)		31. Comparison of glottal flow rate predicted by inverse filtering and direct measurements (Liran Oren, PhD)		46. Simulations of child-like speech as test material for speech analysis algorithms (Brad Story, PhD)			
14:20 - 14:40					11. Effect of Beta-Catenin signaling on cell proliferation in developing vocal folds and its potential for vocal fold regeneration and repair in adulthood (Vlasta Lunova, PhD)		32. The influence of sound emission on the lamina propria of the ventricular fold (Andre Armani, MD)		47. Effectiveness of recurrence quantification measures in discriminating patients with and without voice disorders (Leonardo Lopes, PhD)			
14:40 - 15:00					12. Using RNA-Seq Characterization of Differently Expressed Genes from Larynx Responding to Smoking and Reflux (Xia Chen, PhD)		33. Computer controlled set-up for automated phonation excitation in excised larynx experiments (Veronika Birk, Ms)		48. Discriminating patients with vocal fold nodules from matched controls using acoustic and aerodynamic features from ambulatory voice monitoring data (Juan Pablo Cortés, MS)			
15:00 - 15:20					13. Aortic arch compliance and idiopathic left-sided vocal fold paralysis (Julie Barkmeier-Kraeme, PhD)		14. Electrophysiological activity of the pharyngoesophageal segment and tracheoesophageal voice and speech proficiency in total laryngectomees (Hilton Ricz, MD, PhD)		15. Toward a Psychoacoustic Model of Spectral Noise in the Voice Source (Rosario Signorello, PhD)		16. Brain Mapping of Laryngeal Sensorimotor Control in Normal Phonation (Maryna Kryshchopava, PhD)	
15:20 - 15:40					17. Universal mechanisms of sound production and control in birds and mammals (Christian Herbst, PhD)		18. The Effect of Social Isolation on Vocalizations and Neuromuscular Junctions of Aged Rats (Aaron Johnson, PhD)		19. Highly resolved temporal analysis of the flow field in a synthetic human larynx model (Alexander Lodermeier, Mr)		20. Subharmonic tone generation in an artificial vocal fold model (Stefan Kniesburges, PhD)	
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16:00 - 16:20	Short Course 3, Part 2: Using computer models to validate therapy and surgery approaches Ingo Titze, PhD		Short Course 4, Part 2: Tissue engineering of the human vocal folds Luc Mongeau, PhD		Poster session (See separate list of posters)		49. Constructing a subject-specific lumped-mass model from clinical data using Bayesian estimation (Gabriel Galindo, PhD-C)					
16:20 - 16:40							50. Phonation Type as a Function of the Activation of the Intrinsic Laryngeal Muscles (David Berry, PhD)		51. Relative Fundamental Frequency Distinguishes Between Phonotraumatic and Non-Phonotraumatic Vocal Hyperfunction (Cara Stepp, PhD)			
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19:00 - 21:00	Welcome Reception		Valparaiso Walking Tour		Gala Dinner		Technical USM Tour					

Special Session: Virtual phonosurgery and other applications of numerical models, Chair: Ingo Titze.
 special Session: Viscous flow phenomena in laryngeal aerodynamics, Chair: Byron Erath
 Special Session: Challenges and advances in high-resolution endoscopic imaging, Chair: Daryush Mehta
 Special Session: Applying engineering methods for the clinical assessment of vocal function, Chair: Mara Behlau
 Regular Session 1 Chair: Cara Stepp
 Regular Session 2 Chair: Sean Peterson
 Poster session, Chair: Matias Zaňartu
 Regular Session 3 Chair: Matias Zaňartu