# The 16<sup>th</sup> International Conference on Advances in Quantitative Laryngology, Voice and Speech Research

June 24 – 27, 2025 Groningen, the Netherlands





# Contents

History of AQL	3
Welcome to AQL 2025	4
Organizing committee	5
AQL keynote speakers	7
About the city of Groningen	9
Food and drink recommendations	10
Sightseeing recommendations	11
Conference venues	13
Map of the conference venues	15
Workshop day	17
Conference program	18
Podium sessions 1 – 4	
Poster session 1	21
Podium sessions 5 – 7	22
Poster session 2	23
Podium sessions 8 – 9	24
Communications	25

# **History of AQL**

The first AQL meeting took place in Erlangen, Germany in 1996. The collaborative workshop forum was first intended to be a venue where voice laboratories in Europe (mainly from Germany), could meet annually to provide updates on their progress on different aspects of quantitative assessment of laryngeal functions, voice and speech, and to set new goals. This collaborative effort was funded by member laboratories, and the German Research Foundation (DFG), in conjunction with other European funding agencies, the laboratories' institutional funding mechanisms, and/or through grants from private industry. The first four AQL meetings were thus collaborative workshops between European memberlaboratories, producing progress reports. Non-member participants from other laboratories and nationalities were also involved.

Over the next four years (1996-2000), the AQL initiative grew very quickly and gained the respect and recognition of the international voice community. The meeting quickly expanded from 15 to 50 participants.

The 2001 AQL conference in Groningen, the Netherlands, marked the first international AQL with participants from across the world. The following AQL International Conferences were held in Hamburg, Germany (2003); in Groningen, the Netherlands (2006); in Stockholm, Sweden (2008); and in Erlangen, Germany (2010). These international scientific meetings had a strong impact on voice research, through the publication of proceeding materials. Since the 9th AQL 2010, in Erlangen, Germany, student workshops aimed at disseminating voice science have been added to the scope. Funding for the student summer school was initially obtained from the COST Action 2103 "Advanced voice function assessment," for dissemination of scientific knowledge among scientists and students from the participating European nations. In July 2012, another voice conference, the 8th International Conference on Voice Physiology and Biomechanics, was similarly organized in cooperation with the COST Action 2103.

The AQL was first held outside Europe in 2013. The 10th AQL Conference, in Cincinnati, Ohio, further broadened the scope and outreach of the previous AQL conferences. The AQL returned to Europe in London, the United Kingdom, in 2015 where it was held in conjunction with the 4th International Occupational Voice Symposium. The 12th AQL was held in Hong Kong, the first AQL conference to be held around the Asia-Pacific Rim. The 13th AQL was held in Montreal, Canada, the 14th AQL was held in Bogotá, Colombia (virtual). In 2023, the 15th edition of AQL was held in Phoenix, Arizona, USA at the Mayo Clinic.

In 2025, the 16th AQL will return to Groningen, the Netherlands.



# Welcome to AQL 2025 in Groningen!

It is with great pleasure that we welcome you in Groningen for the 16<sup>th</sup> International AQL Conference!

Over the coming days, we will explore the latest developments in voice and speech research with a diverse programme full of excellent submissions. The first day will be devoted to workshops and discussions. This year, the conference has a particular emphasis on quantitative approaches to understanding voice and speech disorders.

Groningen, known for its vibrant academic community and rich cultural scene, provides an inspiring backdrop for AQL, with previous editions hosted here in 2001 and 2006. We encourage everyone to engage fully in the conference activities, but also to take the opportunity to experience our city's unique atmosphere. We hope you'll get to know Groningen and discover the beauty and spirit that make us proud to call it our home.

To facilitate your discovery of Groningen, we have organized a welcome reception at Brouwerij Martinus, a family-owned brewery nestled in a historic building in the city center. Here, you'll have the opportunity to sample locally brewed beers and enjoy the cozy atmosphere.

Our conference dinner will be held at Restaurant Graansilo, situated in a recently renovated grain warehouse overlooking the Winschoterdiep canal. This unique venue offers a surprise four-course menu crafted from seasonal, local ingredients, providing a memorable culinary experience.

We look forward to everyone's contributions and to the fruitful discussions that will shape the future of quantitative laryngology, voice, and speech research.

The AQL 2025 Organizing Committee,

Defne Abur, Frank Tsiwah, Michelle Bretl, Thomas Tienkamp, Valentine Lucquiault



# Organizing committee





### **Defne Abur**

<sup>1</sup>Center for Language and Cognition Groningen, University of Groningen <sup>2</sup>Research School of Behavioural and Cognitive Neurosciences Groningen d.abur@rug.nl

Defne Abur is an Assistant Professor of Speech & Speech Technology at the University of Groningen. She directs the <u>Speech Biosignal</u> <u>Processing Lab</u> which examines a variety of biosignals to characterize typical and disrupted auditory function and speech production. Her research takes an interdisciplinary approach combining engineering, hearing science, and speech science.

#### Frank Tsiwah

<sup>1</sup>Center for Language and Cognition Groningen, University of Groningen f.tsiwah@rug.nl

Frank Tsiwah is an Assistant
Professor of (Neuro-) Computational
Linguistics at the University of
Groningen. His current research
focuses on the use of
Large Language Models and other
machine learning approaches towards
investigating speech, language, and
human cognition, with particular
emphasis on disordered speech
and language.



# Organizing committee



### Michelle Bretl

<sup>3</sup>Department of Communication Sciences and Disorders, University of Wisconsin-Madison bretlm@surgery.wisc.edu

Michelle Bretl is a PhD candidate in the Department of Communication Sciences and Disorders at the University of Wisconsin - Madison under the mentorship of Dr. Susan Thibeault. Michelle's research interests broadly include the development of more consistent and reliable treatments for voice and upper airway disorders, particularly hard-to-treat disorders such as vocal fold scar. Her current research investigates the effect of gene editing on vocal fold fibroblast function, particularly related to wound healing.

### **Thomas Tienkamp**

<sup>1</sup>Center for Language and Cognition Groningen, University of Groningen t.b.tienkamp@rug.nl

Thomas Tienkamp is a PhD candidate at the University of Groningen and he is affiliated with the Faculty of Arts as well as the Department of Oral and Maxillofacial Surgery at the University Medical Centre Groningen. Thomas' research aims to characterize speech outcomes following oral cancer treatment. To this end, he employs acoustic, kinematic, perceptual, and patient-reported outcomes. Through this holistic approach, Thomas hopes to inform and improve speech rehabilitation strategies for this population in the future.



### Valentine Lucquiault

<sup>1</sup>Center for Language and Cognition Groningen, University of Groningen v.lucquiault@student.rug.nl

Valentine Lucquiault holds a Master's degree in cognitive engineering. She is currently extending her training in the Language and Cognition Research Master at the University of Groningen. She is preparing to pursue a PhD combining her engineering background with clinical questions in voice and speech.



AQL 2025 6

# **AQL 2025 Keynotes**



Sonja Kotz is a translational cognitive neuroscientist, investigating temporal, rhythmic, and formal predictions in audition, music, and speech across the lifespan, pathologies (PD, stroke, tinnitus, psychosis, dyslexia), and animal models. In her research she utilizes a wide range of behavioral and neuroimaging s/f/rsMRI, TMS). (M/EEG. She heads Neuropsychology section at Maastricht University (NL) and holds honorary professorships at the University of Leipzig (DE), and University of Lisbon (PT). She is a senior/associate editor for Imaging Neuroscience, Cortex, Neurobiology of Language, and PlosOne. Find out more about her Basic and Applied NeuroDynamics lab.

# Srikantan Nagarajan is a tenured

Professor in the Department of Radiology and Biomedical Imaging at the University of California, San Francisco. His research interests include determining neural mechanisms of speech motor control and understanding human brain plasticity associated with learning and disease. He has been involved in the development and refinement of machine learning algorithms and computational models for multimodal structural and functional brain imaging, to help with diagnosis, monitoring and prognosis in various brain disorders. Dr. Nagarajan's translational current research includes brain studies in program imaging Hearing Dementias, Voice Disorders. and Neurodevelopmental Disorders, Brain Tumors. Epilepsy and Schizophrenia. He is a fellow of the IEEE and the AIMBE.





**AQL 2025** 

# **AQL 2025 Keynotes**



Kaila Stipancic is an assistant professor and director of the Buffalo Oromotor, Speech, & Swallowing Lab in the Department of Communicative Disorders and Sciences at the University at Buffalo. She completed her PhD in Rehabilitation Sciences at the MGH Institute of Health Professions. Dr. Stipancic is also a licensed Speech-Language Pathologist who completed her clinical master's degree at the University at Buffalo and her clinical fellowship at the University of Wisconsin-Madison with a specialization in dysphagia prior to pursuing her PhD. This clinical training greatly influenced her research directions. Her research seeks to advance the assessment of oromotor impairments and dysarthria for individuals with a variety of neurological etiologies using perceptual, acoustic, kinematic, and neurophysiologic She is particularly interested in methodologies. improving relevant understanding and measures that are used clinically and in research settings, with the ultimate goal being to optimize the care of patients with oromotor impairments.

# About the city of Groningen

# Groningen: a city shaped by students and stadjers alike

Situated in the North of the Netherlands, Groningen (or *Grunn* as the locals call it) is built around learning and discovery. With the University of Groningen at its heart, the city has a long academic tradition and a large student population that brings a steady flow of new ideas and perspectives. This youthful energy shapes daily life, with cafés, bars, libraries, and cultural spaces all reflecting the pace and rhythm of a university town. Together, students and locals, the *Stadjers*, shape the atmosphere of Groningen: open, curious, and community-oriented. With its compact layout and extensive cycling infrastructure, the city is easy to navigate and invites both newcomers and lifelong residents to make it their own.



Throughout the year, Groningen hosts a wide range of festivals and cultural events. In January, the city is home to *Eurosonic* Noorderslag, one of Europe's leading showcase festivals for new musical talent, drawing artists, industry professionals, and music lovers from across the continent. In summer, the city hosts the Noorderzon Festival, where performance, art, and food are brought together all throughout the city's main park, the Noorderplantsoen. These events frequently feature research talks and/or educational outreach, connecting the city and the University of Groningen community. When the park is not hosting a festival, it functions as a shared living room for all students during the summer months. In short, there's something happening in Groningen all year round, contributing to the city's dynamic, yet relaxed and approachable atmosphere.



Academy building, University of Groningen Source: <a href="https://www.rug.nl/news/2024/10/het-academiegebouw">https://www.rug.nl/news/2024/10/het-academiegebouw</a>



Noorderzon 2023 SPAAKLAB speech research outreach



Noorderplantsoen Source: https://www.birdeyes.nl/2019/03/noorderplantsoen-Groningen/



# **Discover Groningen**

# COFFEE, TEA, BAKERIES



Koffiestation Mr Dam

Black and Bloom FLFL

Paais (Pie café) Il Gusto

Broodje van Eigen Deeg Ra bowls



# LUNCH & DINNER

Het Concerthuis Eetcafé Lambik

Thai Jasmine Gustatio

Konbu Streetfood Bistro Boys

Bar Barrie Tarantè 081

Anne & Max Cervantes



De Pintelier

Vin Natuur

Café Hooghoudt

Het Pomphuis

Boel (petanque bar!)

The Stockroom

Pacific

Café Wolthoorn



AQL 2025

# **Discover Groningen**

### **SIGHTSEEING**



© Groninger Museum, Groningen Photo: Erik en Petra Hesmerg 2014





Source: https://www.birdeyes.nl/2019/03/noorderplantsoen-Groningen/



# **Discover Groningen**

### **SIGHTSEEING**



# AQL 2025 Conference, Workshop and Social Event Locations

### **Academy Building**

Broerstraat 5, 9712 CP Groningen

### Location during:

Workshops



# House of Connections

Grote Markt 21, 9712 HR Groningen

### Location during:

 Main program (Wedesday – Friday) with talks and keynote



### Harmony building

Oude Kijk in Het Jatstraat 26, 9712 GR Groningen

### Location during:

 Poster sessions on Wednesday and Thursday





# **Reception and Conference Dinner**

# Reception: Brouwerij Martinus (10 min walk from House of Connections)

- June 25th, 17:30-19:30
- Kostersgang 32-34, 9711 CX Groningen



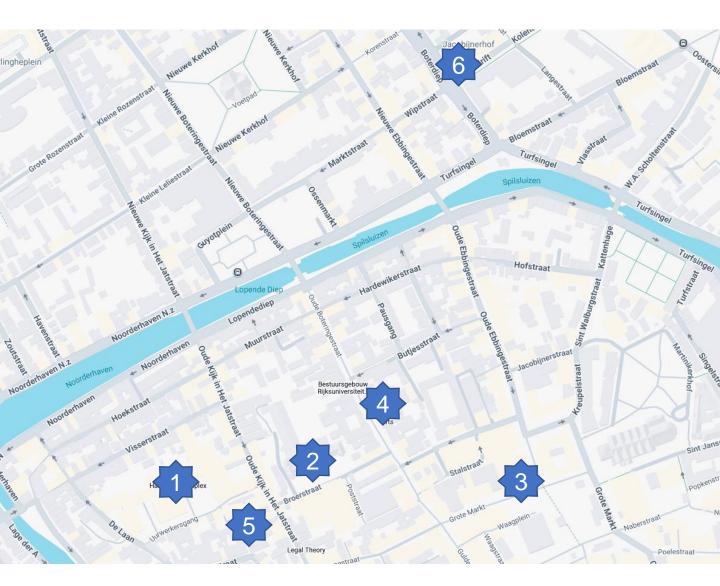
# Conference Dinner: <u>Graansilo</u> (15 min walk from House of Connections) June 26th, 19:00-21:30

• Griffeweg 4, 9724 GG Groningen





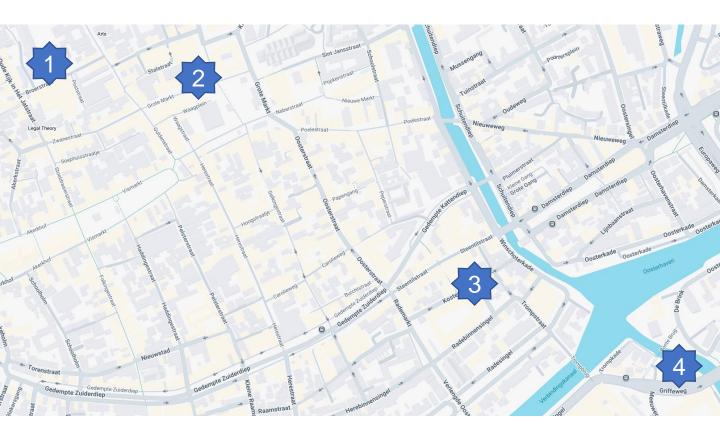
# Map of the city centre



- Harmony Building (Oude Kijk in Het Jatstraat 26, 9712 GR Groningen)
- Academy Building (Broerstraat 5, 9712 CP Groningen)
- House of Connections (Grote Markt 21, 9712 HR Groningen)
- 4. Hotel Halbert (Oude Boteringestraat 43, 9712 GD Groningen)
- 5. The Happy Traveller (Kleine Kromme Elleboog 5, 9712 BS Groningen)
- 6. The Social Hub (Boterdiep 9, 9712 LH Groningen)



# Location of the Reception and Conference Dinner



- 1. Academy Building (Broerstraat 5, 9712 CP Groningen)
- 2. House of Connections (Grote Markt 21, 9712 HR Groningen)
- 3. Brouwerij Martinus (Kostersgang 32-34, 9711 CX Groningen)
- 4. Graansilo (Griffeweg 4, 9724 GG Groningen)



# Workshops – June 24th, 2025

Location: Offerhauszaal (Academy building)

10:00 - 11:00 am



### **Vocal learning in songbirds**

Sanne Moorman

(Groningen Institute for Evolutionary Life Sciences)

Part I (11:00 - 12:00)

**Lunch (provided)** 

Part II (1300 - 14:00)



# Statistics Workshop (Generalized Additive Models)

Jacolien van Rij

(Bernoulli Institute for Mathematics, Computer Science and Artificial Intelligence)



### 3D Lab for Speech Prostheses

Max Witjes: introduction into the 3D lab UMCG

Annelies Mulder: 3D personalized vocal cord medialization Reinier ten Brink: AI tools for 3D planning in health care

(Oral & Maxillofacial Surgery and Head and Neck Cancer, University

Medical Center Groningen)

15:00 - 16:00



### SPRAAKLAB Mobile Speech Lab

Thomas Tienkamp
Valentine Lucquiault

(Center for Language and Cognition)



# **AQL 2025 Main Program**

Wednesday June 25th		Thursday June 26th		Friday June 27th	
Location	House of connections	Location	House of connections	Location	House of connections
8:30 onward	Registration	8:30 onward	Registration		
9:00 - 9:15	Welcome to AQL				
9:15 - 10:10	Podium Talk Session 1	9:00 - 10:10	Podium Talk Session 5	9:10 - 10:20	Podium Talk Session 8
10:10 - 10:30	break	10:10 - 10:30	break	10:20 - 10:45	break
10:30 - 11:25	Podium Talk Session 2			10:45 - 11:40	Podium Talk Session 9
		10:30 - 11:30	KEYNOTE: Kayla Stipancic	11:40 - 12:00	Conference closing and poster awards
11:25 - 12:25	5 - 12:25 KEYNOTE: Sonja Kotz		Podium Talk Session 6		Bagged lunch (provided)
	Lunch (provided)		Lunch (provided)		
13:30 - 14:40	Podium Talk Session 3	13:30 - 14:25	Podium Talk Session 7		
14:40 - 14:50	break	14:25 - 15:25 <b>KEYNOTE: Srikantan Nagarajan</b>			
14:50 - 15:45	Podium Talk Session 4				
Location	Marielokezaal, Harmony building	Location	Marielokezaal, Harmony building		
			Poster session 2		
15:45 - 17:15	Poster session 1	Location	Graansilo Restaurant		
Location	Brouwerij Martinus	19:00 onward Conference dinner			
17:30 - 19:30					



### Podium Sessions 1 – 4

#### Wednesday June 25 - Podium Sessions (12 min talk + 3 min Q&A, with combined panel at the end) Title **Authors** Time Vocal Fold Vibratory Kinematics in 9:15 - 9:30Laura E. Toles, Avery Moore, Ted Mau Pressed and Breathy Phonation Jameson Cooper, Benjamin Kevelson, Test-Retest Reliability of The Daily Hamzeh Ghasemzadeh, Daryush **Podium** Phonotrauma Index: Normal Variance 9:30 - 9:45Mehta, Robert Hillman, Jarrad Van Session Across Short- And Long-Term Time Scales Towards Reproducible Acoustic Measurements Obtained During Rigid Jan G. Švec, Dominika Valášková, 9:45 - 10:00Laryngoscopy with an Endoscope-Jitka Vydrová Mounted Microphone 10:00 - 10:10 Panel discussion with all speakers Tailored Stimuli to Investigate the Neural Etienne Gaudrain, Sarah Verhulst, 10:30 - 10:45Coding of Speech Deniz Başkent Valentine Lucquiault, Thomas Sensorimotor Control of Vocal Pitch 10:45 - 11:00 Tienkamp, Hedwig Sekeres, Martijn Across Age in Adulthood Podium Wieling, Defne Abur Session Francisco Contreras-Ruston, Antoni 2 Voice Loudness, Self-Assessment and Callen, Matías Zañartu, Héctor 11:00 - 11:15 Auditory-Sensory Feedback in Voice Arriagada-Concha, Antonia Lagos-Production in Parkinson's Disease Villaseca, Sandra Rojas, Carla Napolitano, Jordi Navarra, Sonia Kotz 11:15 - 11:25 Panel discussion with all speakers Deep Learning-Based Laryngo-Tracheal Amulya Vankayalapati, Nour Awad, Landmark Tracking for Rapid and Safe Manikanta Varaganti, Laura J. 13:30 - 13:45Vocal Fold Injection Brattain, Gregory R. Dion Mechanisms of Vocal Fold Inferior Medial 13:45 - 14:00 Bulging with Thyroarytenoid Muscle Tsukasa Yoshinaga, Zhaoyan Zhang **Podium** Activation Session Engineered Composite Hydrogels for In 3 14:00 - 14:15 Situ Tissue Repair: Enhanced Adhesion, Sara Nejati, Luc Mongeau Porosity, And Immunomodulation Psychosocial Stress-Induced Changes in Anumitha Venkatraman, Katelyn 14:15 - 14:30 Vocal Fold Epithelial Barrier Integrity Jacobs, Susan Thibeault 14:30 - 14:40 Panel discussion with all speakers



Podium Session 4	14:50 – 15:05	Injectable Click Decellularized Extracellular Matrix Hydrogels for Vocal Fold Tissue Engineering: An In Vivo Biocompatibility Study	Mika Brown, Hideaki Okuyama, Maryam Tabrizian, Nicole Y.K. Li- Jessen	
	15:05 – 15:20	A Multi-Material Hydrogel Model to Study Chronic Fibrosis in Vocal Folds	Mohaddeseh Mohammadi, Ayda Pourmostafa, Daniel Li, Hossein Goodarzi, Amir K. Miri	
	15:20 – 15:35	Innovating Treatments for Vocal Fold Scarring: Controlled Dexamethasone Delivery with a Novel Light-Activatable Implant	Denzel Ryan Cruz, Nour Awad, Avery Zheng, Alexander Karabachev, Charles Farbos de Luzan, Yoonjee C. Park, Gregory R. Dion	
	15:35 – 15:45	Panel discussion with all speakers		

# **Poster Session 1**

	Wednesday June 25 – Poster Session 1			
#	Title	Authors		
1	Effects Of Surgery on The Relationship Between Subglottic Pressure and Fundamental Frequency in Vocal Fold Dynamics in Patients with Benign Laryngeal Diseases	Wen-Hsuan Tseng, Hsiang-Ling Chiu, Tzu-Yu Hsiao, Tsung-Lin Yang		
2	Improving Vocal Fold Paralysis Detection from Voice Recordings Using a Robust ML Mode	Juliette Dindart, Hélène Massis, Trung Kien Bui, Agnès Rouxel, Christophe Trésallet, Claire Pillot-Loiseau, Frédérique Frouin		
3	Use Cases for Optopalatographic Articulatory Measurements: A Portable and Easy to Use Solution	João Menezes, Arne-Lukas Fietkau, Jihyeon Yun, Peter Birkholz		
4	Clustering Study of Voice Characteristics of Mandarin Speakers in Lifespan	Dai Xiao, Liang Changwei, Lu Yao, Wu Xiyu, Kong Jiangping		
5	Enhancing Glottis Segmentation in Laryngeal High-Speed Videoendoscopy Using Yolo-Based Roi Detection	Alondra Araya, Emiro Ibarra, Matías Zañartu		
6	Visual Perceptual Analysis of Vibratory Patterns and Mucosal Wave Differences Between Vocally Healthy Children and Children with Vocal Fold Nodules	Bernhard Jakubaß, Hamide Ghaemi, Maggie Lynn Stall, Dimitar D. Deliyski, Rita R. Patel		
7	Feedback And Feedforward Auditory-Motor Processes for Voice and Articulation in Hearing Loss	Andrea Alves Maia, Luis M. T. Jesus		
8	A Dosimetry Comparative Study in Dear Evan Hansen	Ana Zuim, Celia Stewart, Ingo Titze, Aaron Johnson		
9	Voice Cepstral Peak Prominence Metrics in Italian by Age, Sex, And Pre-Processing Method	Irene de Nijs, Thomas Tienkamp, Martijn Wieling, Defne Abur		
10	New Perspectives Through Comprehensive and Multimodal Voice Diagnostics: Findings from a Current Intervention Study with German Teachers	Christian Gegner, Jonas Hauck, Marina Giglberger, Richard Göllner, Brigitte M. Kudielka, Anita Schilcher, Stefan Wüst, Sven Hilbert		
11	Exploring The Use of Amniotic Materials to Prevent Vocal Fold Scar After Injury	Jenny L Pierce, Brendan Olson, Ray M Merrill, Anika Isom, Kim Lanaghen, Omar Gharbia, Sidney Kaufmann, Marshall E Smith, Michael B Christensen		
12	Histological Evaluation of Human Laryngeal Embryogenesis	Vlasta Lungova, Jessica M. Fernandez, Susan L. Thibeault		
13	Laryngoresponders: Are They More Common in Individuals Diagnosed with Vocal Hyperfunction?	Daphne S. Toglia, Nicole Tomassi, Allison S. Aaron, Turley Duque, Kaitlyn A. Siedman, Jose M. Rojas, Lauren F. Tracy, J. Pieter Noordzij, Cara E. Stepp		
14	Post-Influenza Airway Injury: Immune Cell Recruitment and Oncogene Myc-Driven Basal Cell Regeneration	Alexander G. Foote, Xin Sun		
15	Comparability And Quantification of Vocal Tract-Related Efficiency Strategies of Different Voice Qualities in Four Professional Singers	Fiona Stritt, Stefanie Rummel, Johannes Fischer, Michael Bock, Bernhard Richter, Matthias Echternach, Louisa Traser		
16	Vowel Onset VRT: A Comparison of Signal Envelope Algorithms and Their Key Parameters	John Holik, Duy Duong Nguyen, Tünde Szalay, Tomás Arias-Vergara, Michael Döllinger, Catherine Madill		
17	Voice Acoustic Parameters and Working Conditions in Colombian Healthcare Workers	Lady Catherine Cantor-Cutiva, Andrés Carrillo- González		
18	Pitch Reflex Responses in Individuals with Hearing Impairment Via Acoustics and Electroencephalography	Tony Schelhorn, Benjamin Peschel, Michael Döllinger, Defne Abur, Ulrich Hoppe		
19	Role Of Piezo1 in Human Vocal Fold Fibroblasts	Se-in Kim, Vlasta Lungova, Susan Thibeault		
20	Toward Automated Voice Quality Evaluation: Can an Acoustic Multiparametric Index Match Machine Learning Performance?	Ahmed M. Yousef, Emma C. Willis, Vahni Tagirisa, Robert E. Hillman, Daryush D. Mehta		



# Podium Sessions 5 – 7

Thursday June 26th – Podium Sessions				
(12 min talk + 3 min Q&A, with combi			,	
	Time	Title	Authors	
	9:00 – 9:15	An Update on Conversation Training Therapy (CTT)	Amanda I Gillespie, Jackie Gartner-Schmidt	
Podium	9:15 – 9:30	The Effect of Listener Feedback on Sensorimotor Adaptation in Articulation and Prosody	Kimberly L. Dahl, Manuel Díaz Cádiz, Cara E. Stepp	
Session 5	9:30 – 9:45	Effects Of Delayed Auditory Feedback on Speech Kinematics	Christopher Dromey, Abbey Persons	
3	9:45 – 10:00	Sibilant Differentiation Following Tongue Cancer Surgery: Evidence from Longitudinal Articulatory- Kinematics 6- And 12-Months Post-Surgery	Thomas B. Tienkamp, Teja Rebernik, Raoul Buurke, Nikki Hoekzema, Dan Mu, Katharina Polsterer, Hedwig Sekeres, Rob J.J.H. van Son, Martijn Wieling, Max J.H. Witjes, Sebastiaan A.H.J. de Visscher, Defne Abur	
	10:00 – 10:10	Panel discussion with all speakers		
Podium Session 6	11:30 – 11:45	Spatiotemporal Indices of Relative Fundamental Frequency for Quantifying Intraspeaker Variability in Vocal Hyperfunction	Jenny Vojtech, Laura E. Toles, Daniel P. Buckley, Cara E. Stepp	
	11:45 – 12:00	Differences In Ambulatory Sympathetic Arousal Between Patients with Vocal Hyperfunction and Vocally Healthy Controls	Jeremy Wolfberg, Jameson C. Cooper, Daryush Mehta, Nelson Roy, Robert E. Hillman, Jarrad H. Van Stan	
	12:00 – 12:15	Effects Of Cognitive Load On Vocal Motor Control: Changes in Subglottal Pressure and Laryngeal Muscle Activation	Rocío B. Ortega, Jesús A. Parra, Nicolás F. Quinteros, Emiro Ibarra, Cara E. Stepp, Matías Zañartu	
	12:15 – 12:25	Panel disc	ussion with all speakers	
	13:30 – 13:45	Transverse Ultrasound Imaging of the Phonating Larynx	Mark K. Tiede, D.H. Whalen, Laura L. Koenig	
Podium Session 7	13:45 – 14:00	Asynchronous Parallel Reinforcement Learning for Voice Control in a Human Larynx Model	Hem Pandeya, Xudong Zheng, Qian Xue	
	14:00 – 14:15	Quantifying The Vocal Fold Oscillations Using Dynamic 3D Magnetic Resonance Imaging	Paula Jordan, Johannes Fischer, Fiona Stritt, Marie Köberlein, Louisa Traser, Bernhard Richter, Michael Bock	
	14:15 – 14:25	Panel disc	ussion with all speakers	



# **Poster Session 2**

	Thursday June 26 – Poster	Session 2
1	Quantifying Anatomic, Morphologic, Acoustic, And Perceptual Characteristics of Tracheoesophageal Voice Pre and Post Balloon Dilation Utilizing High Speed Digital Imaging	Angela Dionisio, Layne Singer, Charles Farbos De Luzan, Gregory R. Dion
2	Measuring The Effects of Corticosteroid Use on Vocal Fold Inflammation and Biomechanics Using a Rabbit Model	Maya Stevens, Brendan Olson, Anika Isom, Douglas Roberts, Jenny Pierce, Julie M Barkmeier-Kraemer, Ray Merrill, Kristine Tanner, Ben Christensen
3	Development And Validation of Personal Technology to Treat Hypophonia in Patients with Parkinsons Disease	Amanda I Gillespie, Adam Klein, Meredith Caveney, David Anderson
4	Modeling Uncertainty in Speech Adaptation to Sensory Feedback Perturbations	Nicolás F. Quinteros, Juan P. Cortés, Jesús A. Parra, Hasini R. Weerathunge, Frank H. Guenther, Matías Zañartu
5	Identifying The Speech Breathing Kinematics of Older Adults with Presbyphonia	Brian Saccente-Kennedy, Jessica Huber, Martin Wiegand, Matthew Maddocks, Roganie Govender
6	Differences In Vocal Fold Vibratory Kinematics Between Women with Phonotrauma and Vocally Healthy Controls	Laura E. Toles, Ted Mau
7	Comparison Of Salivary Cortisol Levels Across Laryngeal Pathologies	Anumitha Venkatraman, Ruth Davis, Seth Pollak Susan Thibeault
8	Targeted Nebulized ECM Therapy for Vocal Fold Healing	Nour Awad, Alexander D. Karabachev, Ramair Colmon, Camilo A Mora-Navarro, Donald O. Freytes,
		Gregory R. Dion
9	Discovering The Effects of Vascular Lesions of the Vocal Fold Via Computational Modeling	Manoela Neves, Rana Zakerzadeh
10	A Platform for Monitoring Ecological Vocal Efficiency	Ahmed M. Yousef, Adrián Castillo-Allendes, Mark L. Berardi, Juliana Codino, Adam D. Rubin, Eric J. Hunter
11	Dynamic 3D Vocal Fold MRI For Quantification of Vocal Fold Oscillations in Different Voice Production Mechanisms	Louisa Traser, Johannes Fischer, Paula Jordan, Fiona Stritt, Marie Körberlein, Jonas Kirsch, Stefanie Rummel, Bernhard Richter, Michael Bock, Matthias Echternach
12	Sound Pressure Level Differences Between Standard Laboratory Setup and Ambulatory Voice Monitoring Devices: A Pilot Study	Víctor M. Espinoza, Alberto Valdivia, Juan P. Cortés, Matías Zañartu
13	Electroglottographic Analysis of the Voice in Mandarin-Speaking Children	Wang Binghao, Lu Yao, Liang Changwei, Wu Xiyu, Kong Jiangping
	A Tool for Efficient HSV Rating Based on the Voice-Vibratory	Jonas Donhauser, Anne Schützenberger, Rita Patel,
14	Assessment with Laryngeal Imaging (VALI) Form	Michael Döllinger
15	Temporal Changes in Relative Fundamental Frequency in Continuous Speech: Contrasting Effects of State Vocal Fatigue And Vocal Fatigue Index Scores	Mark Berardi, Yixiang Gao, Gui DeSouza, Maria Dietrich
16	Classification Of Adductor Spasmodic Dysphonia with Audio and Glottal Area Waveform Fusion	Hiroki Sato, David Crandall, Weslie Khoo, Rita Patel
17	Speech Intelligibility in Speakers with Adductor Laryngeal Dystonia	Turley Duque, Jenny M. Vojtech, Katherine L. Marks, Laura E. Toles, Cara Sauder,
	(ADLD)	Tanya L. Eadie, & Cara E. Stepp
18	The Effect of Intentional Voice Quality Alteration on Mental Effort Captured Via Pupillometry and Via The NASA-TLX And Borg CR-10 Scales	Eva van Leer, Lucas Ribas, Madison Won, Tianqi Luan
19	A Total Variation Based Semi-Automatic High-Speed Video Denoising Pipeline	Benjamin Peschel, Tony Schelhorn, Ulrich Hoppe, Rosa Uhl, Moritz Bingold, Michael Döllinger



# **Podium Sessions 8 - 9**

Friday June 27th – Podium Sessions					
	(12 min talk + 3 min Q&A, with combined panel at the end)				
	Time	Title	Authors		
Podium Session 8	9:10 – 9:25	Arytenoid Adduction and Medialization: Resolving Height Asymmetry and Posterior Gap to Optimize Vocal Efficiency	Liran Oren, Charles Farbos De Luzan, Jacob Michaud-Dorko, Ephraim Gutmark, Greg Dion		
	9:25 – 9:40	A Microengineered Vocal Fold Model for High-Through Screening Applications	Leila Donyaparastlivari, Scott Thomson, Chen Shen, Amir K. Miri		
	9:40 – 9:55	Simulation Of Flow Induced Vibration of the Vocal Folds Using the Lattice Boltzmann Method	Stefan Kniesburges, Bogac, Tur, Adrian Kummerländer, Mathias J. Krause		
	9:55 – 10:10	A Feasibility Study of Subharmonic Voice Detection by Deep Learning	Takeshi Ikuma, Brad Story, Andrew McWhorter, Melda Kunduk		
	10:10 – 10:20	Panel discussion with all speakers			
Podium Session 9	10:45 – 11:00	Acoustic-Aerodynamic Vocal Efficiency Metrics Identify Changes in Vocal Function Following Voice Therapy for Phonotraumatic Vocal Hyperfunction Subgroups	Emma C. Willis, Annie B. Fox, Jarrad Van Stan, Jameson Cooper, Ben Kevelson, Robert E. Hillman, Daryush D. Mehta		
	11:00 – 11:15	Respiratory Kinematics in Aging Singers and Non-Singers: Relationship to Vocal Effort	Clotilde Marc, Jessica E. Huber, Maude Desjardins		
	11:15 – 11:30	Modeling Laryngeal Motor Control with Somatosensory Feedback for Prephonatory Vocal Posture	Nicolás F., Quinteros, Jesús A. Parra, Gabriel A. Alzamendi, Matías Zañartu		
	11:30 – 11:40	Panel discussion with all speakers			

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