# ICVPB 2018 Program Book

ICVPB 2018

## 11th International Conference on Voice Physiology and Biomechanics (ICVPB)

August 1-3, 2018, East Lansing, Michigan, USA

*With special topics pre-conference symposium*

## Vocal Effort, Vocal Fatigue, and Vocal Load: What, How and Where

July 31, 2018, East Lansing, Michigan, USA

# Committees

Thank you for all who have spent time and effort preparing for ICVPB 2018!

### *ICVPB 2018 Local Committee*

- Eric Hunter, PhD (Chair)
- Dimitar Deliyski, PhD (Co-Chair)
- Jeff Searl, PhD
- Peter Lapine, PhD
- Maryam Naghibolhosseini, PhD
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- Dimitar Delliyski, PhD (Co-Chair)
- Jeff Searl, PhD
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- Maryam Naghibolhosseini, PhD
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- Pasquale Bottalico, PhD

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- Brad Story, PhD

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# Sponsors

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College of Communication Arts and Sciences, Michigan State University

Dept of Communicative Sciences and Disorders, Michigan State University

# Welcome to ICVPB 2018!

Michigan State University and the Department of Communicative Sciences & Disorders are excited to welcome you to the 11th International Conference on Voice Physiology & Biomechanics. We hope you will enjoy our beautiful campus in the Great Lakes state! Since its inception, the International Conference on Voice Physiology & Biomechanics (ICVPB) has established its reputation as one of the most valuable scientific meetings in the field of voice research.

With the help of our local and scientific committees, we have built upon previous ICVPB conferences to offer an international forum to discuss current scientific research on the larynx and voice. Specifically, the emphasis of this conference will be on basic and applied voice research, rather than clinical research, though we have also specifically invited and encouraged clinical applications to provide context for the work. The program will consist of presentations and discussions pertaining to advances in vocal fold biology with emphasis on in vitro, computer (relevant to biology), bioreactor and animal models.

Preceding the conference is a one-day special topics pre-conference symposium held on July 31st: *Vocal Effort, Vocal Fatigue, and Vocal Load: What, How and Where*. The pre-conference speakers are made up of a diverse cohort of leading clinical experts and accomplished speech and voice scientists, in the areas of vocal fatigue and effort. Together, the most comprehensive picture of the current research and knowledge surrounding vocal fatigue, effort, and load – along with their physiological effects – will be discussed. Direction for future research on this important topic will also be given.

The four keynote speakers for this year's ICVPB are Drs. Sid Khosla, Mara Behlau, Scott Thomson and Anne-Maria Laukkanen. They are among the most prominent experts in the field of clinical laryngology and have substantial track records in voice research. Emphasis will be given to translational research ideas with discussion panels following each keynote lecture to address the most immediate research needs of clinical laryngology and voice.

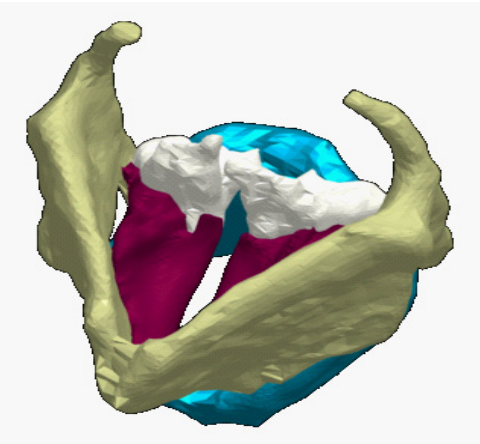
Once again, *Welcome –*
*We are glad to have you here!*

Eric Hunter & Dimitar Deliyski
Co-Chairpersons, 11th International Conference on Voice Physiology and Biomechanics

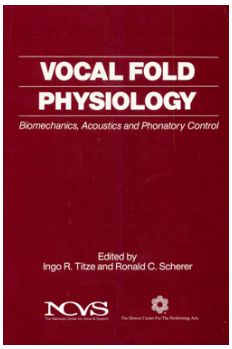
Conference Snapshot

- Tuesday 31 July:
  - Pre-conference symposium
  - Evening: *ICVPB Welcome Reception*
- Wednesday 1 Aug: **ICVPB 2018 Day 1**,
  - Morning: Open Papers
  - Afternoon: Keynote Speakers & Open Papers
- Thursday 2 Aug: **ICVPB 2018 Day 2**
  - Morning: Keynote Speakers & Open Papers
  - Afternoon: Keynote Speakers, Open Papers & Poster Session
  - Evening: *ICVPB Gala Dinner*
- Friday 3 Aug: **ICVPB 2018 Day 3**
  - Morning: Keynote Speakers & Open Papers
  - Afternoon: *Optional Tours*

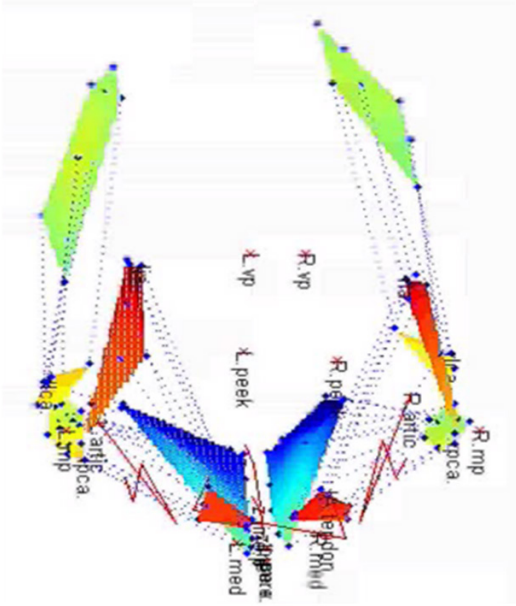
# History

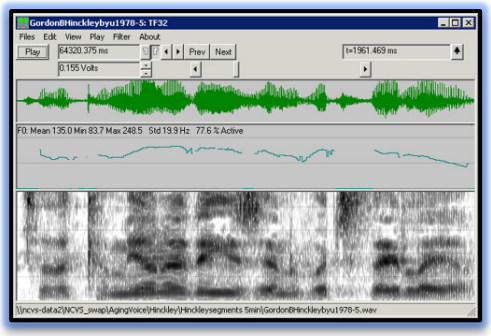


The International Conference on Vocal Fold Physiology and Biomechanics (ICVPB) is one of the prime international forums for current scientific research on the larynx and voice. The focus was and has always been basic science, the physical and biological underpinnings of voice production.

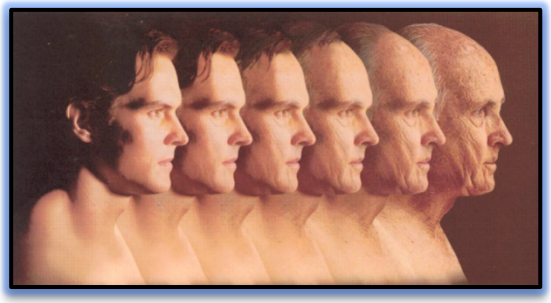



ICVPB dates back to 1980. Initially called the Voice Physiology Conference, it began with five individuals (Wilbur James Gould, Osamu Fujimura, Kenneth Stevens, Minoru Hirano, and Ingo Titze) who brought together voice scientists from Japan and the United States. The first meeting was held in Kurume, Japan, in 1980. After Kurume, meetings took place in Madison, WI (1982), Iowa City, IA (1984), New Haven, CT (1985), Tokyo, Japan (1987), Stockholm, Sweden (1990), Denver, CO (1992), Kurume, Japan (1994), and Sydney, Australia (1995). In total, nine Vocal Fold Physiology Conferences were held.




In 1997, the name of the conference was changed to ICVPB to include the influx of biomechanics and biology into the study of voice production. The first ICVPB meeting was held at Northwestern University in Evanston, Illinois, followed by Berlin, Germany (1999), Denver, CO (2002), Marseille, France (2004), Tokyo, Japan (2006), Tampere, Finland (2008), Madison, WI (2010), Erlangen, Germany (2012), Salt Lake City, UT (2014), Viña del Mar, Chile (2016), and now in East Lansing, Michigan (2018).



# Schedule of Pre-Conference Symposium

## *Tuesday, July 31, 2018, Pre-Conference*

| | |
|---|---|
| 08:30am | ***Pre-Conference Registration*** |
| 09:00 am-09:10 am | ***Welcome – Eric Hunter*** |
| 09:10 am-09:30 am | **From Vocal Effort to Vocal Fatigue. What Does the Literature Say?**<br>Lady Catherine Cantor-Cutiva, Russell Banks, Mark Berardi, Brittany Johnson, Rebecca Clawson, Salma Martínez, Eric Hunter |
| 09:30 am-09:50 am | **Effort Scaling: Challenges and Considerations when Applied to Vocal Production**<br>Miriam van Mersbergen, Lisa Vinney, Eva van Leer |
| 09:50 am-10:10 am | **The Perception of Effort and the Experience of Physical Tension in Fluency Disorders**<br>J Scott Yaruss |
| 10:10 am-10:25 am | **Q&A** |
| 10:25 am-10:45 am | ***Coffee Break*** |
| 10:45 am-11:05 am | **Measuring Patient Perceived Vocal Effort Using the BORG Exertion Scale**<br>Eva van Leer, Miriam van Mersbergen |
| 11:05 am-11:25 am | **The Construct of Effort Applied to the Oral Articulators**<br>Jeff Searl |
| 11:25 am-11:45 am | **Upper Airway Thermoregulation During Singing Warm-Up: Implications for Epithelial Airway Surface Liquid Maintenance and Intrinsic Laryngeal Skeletal Muscle Function**<br>Mary J. Sandage |
| 11:45 am-12:05 pm | **Vocal fatigue: potential physiological mechanisms and treatment implications**<br>Katherine Verdolini Abbott, Chayadevie Nanjundeswaran, Cari Tellis, Christopher Apfelbach |
| 12:05 pm-12:20 pm | **Q&A** |
| 12:20 pm-01:20 pm | ***Lunch (provided to registrants)*** |
| 01:20 pm-01:40 pm | **Body-System Level Cardiovascular Conditioning and Vocal Fatigue**<br>Chayadevie Nanjundeswaran, Jessie Van Swearingen |
| 01:40 pm-02:00 pm | **The Relationship Between Physiological Mechanisms and the Self-Perception of Vocal Effort**<br>Victoria S. McKenna, Manuel E. Diaz-Cadiz, Adrianna C. Shembel, Nicole M. Enos, Cara E. Stepp |
| 02:00 pm-02:20 pm | **Toward the Early Detection of Vocal Fatigue and Risk for Voice Disorders Using Data from the Periphery to the Brain**<br>Maria Dietrich |
| 02:20 pm-02:40 pm | **Quantitative Evaluation of Vocal Fatigue**<br>Luc Mongeau, Nicole Li-Jessen, Zhengdong Lei, Nicholas Ogrodnik, Laura Fasanella |
| 02:40 pm-03:00 pm | **Q&A** |
| 03:00 pm-03:20 pm | ***Coffee Break*** |
| 03:20 pm-03:40 pm | **Aerodynamic Features for Ambulatory Voice Monitoring of Phonotraumatic Vocal Hyperfunction**<br>Matías Zañartu, Juan Pablo Cortés, Daryush Mehta, Víctor M. Espinoza, Robert Hillman, Marzyeh Ghassemi, John Guttag, Jarrad H. Van Stan |
| 03:40 pm-04:00 pm | **A Model for the Vocal Fatigue from Acoustic Vocal Parameters**<br>Pasquale Bottalico, Lady Catherine Cantor-Cutiva, Eric J. Hunter |
| 04:00 pm-04:20 pm | **Toward Objective Ambulatory Measures of Vocal Status in Patients with Vocal Hyperfunction**<br>Daryush D. Mehta, Jarrad H. Van Stan, Robert E. Hillman |
| 04:20 pm-04:40 pm | **Vocal Loading Protocols at MSU**<br>Eric J Hunter |
| 04:40 pm-05:00 pm | |
| 05:00 pm-05:30 pm | **Wrap-up -- Where do we go from here?** |

# Schedule of ICVPB

## *Tuesday, July 31, 2018*

| | |
|---|---|
| 06:30 pm-08:30 pm | **ICVPB Welcome Reception – *Light Refreshments*** |

## *Wednesday, August 01, 2018*

| | |
|---|---|
| 08:30am-09:00 am | Conference Registration |
| 09:00am-09:10 am | Welcome |
| 09:10am-09:20 am | Logistics |
| 09:20am-09:30 am | The Program |
| 09:30am-09:45 am | **Voice Energy Utilization and Efficiency**<br>Michael Krane, Gage Walters, Feimi Yu, Lucy Zhang |
| 09:45am-10:00 am | **Medial Surface Pressure Distributions in Normal Mode Based Glottal Configurations**<br>Simeon Smith, Ingo Titze |
| 10:00am-10:15 am | **Effect of Vocal Tract Constriction on Glottal Maximum Flow Declination Rate Using Tomographic Particle Image Velocimetry Measurements in Excised Canine Larynges**<br>Charles Paul Farbos De Luzan, Sid Khosla, Liran Oren, Alexandra Maddox, Ephraim Gutmark |
| 10:15am-10:30 am | **Onset of Rigor Mortis of the Vocal Folds in an In Vivo-Excised Rabbit Model**<br>Juergen Neubauer, Stephanie Zacharias, David Lott |
| 10:30am-10:45 am | **Roundtable Discussion** |
| 10:45am-11:15 am | ***Coffee Break*** |
| 11:15am-11:30 am | **Development and Analysis of 3D-Printed Synthetic Vocal Fold Models**<br>Ryan Romero, Taylor Greenwood, Clayton Young, Serah Hatch, Mark Colton, Scott Thomson |
| 11:30am-11:45 am | **A Finite Element Study of a Realistic Vocal Fold Posturing Model and Its Coupling with 1D Flow Structure Interaction**<br>Ngoc Pham, Biao Geng, Qian Xue, Xudong Zheng |
| 11:45am-12:00 pm | **Regarding Phonatory Conditions in the In Vivo Canine Larynx Using Automated, Graded Stimulation**<br>David A Berry, Dinesh K Chhetri |
| 12:00pm-12:15 pm | **The Effect of a Posterior Glottal Gap on Contact Pressures in a Synthetic Self-Oscillating Vocal Fold Model**<br>Mohsen Motie Shirazi, Byron Erath |
| 12:15pm-12:30 pm | **Roundtable Discussion** |
| 12:30pm-01:30 pm | ***Lunch (provided to registrants)*** |
| **Keynote**<br>01:30pm-02:10 pm | **Physical and Computational Models for Studying Voice Production Biomechanics**<br>Scott Thomson |
| 02:10pm-02:25 pm | **Lombard Effect in a Restaurant Setting**<br>Pasquale Bottalico, Kelly Kost, Emilie Palacios, Alison Perlman, Angelica Wozniak |

| | |
|---|---|
| 02:25pm-02:40 pm | **Speech Performance Density as a Measure of Long-Term Speaking Characteristics**<br>Brad Story, Kate Bunton |
| 02:40pm-02:55 pm | **Lombard Effect and Muscle Tension Dysphonia: Acoustic, Aerodynamic, Biomechanical and Cortical Changes**<br>Christian Castro, Pavel Prado, Daphne Marfull, Alba Testart, Alejandro Weinstein, Lucia Zepeda, Victor Espinoza, Matias Zañartu |
| 02:55pm-03:10 pm | **Roundtable Discussion** |
| 03:10pm-03:30 pm | ***Coffee Break*** |
| 03:30pm-03:45 pm | **In Vivo Probe for Tracking Intraglottal Pressure, Vocal Fold Collision, and Subglottal Pressure During Phonation**<br>Daryush D. Mehta, James Kobler, Steven Zeitels, Robert Hillman |
| 03:45pm-04:00 pm | **Differentiation Capability of Phonation Biomechanical Features between Presbyphonic and Parkinson Patients' Voice**<br>Andrés Gómez-Rodellar, Pedro Gómez-Vilda, Jiri Mekyska, Irena Rektorova, Agustín Álvarez-Marquina, Victoria Rodellar-Biarge |
| 04:00pm-04:15 pm | **Exact Analytical Model Based on the Theory of Confined Flows for the Assessment of the Relationship Between Tube Parameters and Total Flow Resistance in Semi-Occluded Vocal Tract Exercises**<br>Andrey Ricardo da Silva, Ana Carolina Ghirardi, Matheus R. Reizer, Stephan Paul |
| 04:15pm-04:30 pm | **Roundtable Discussion** |
| | |
| 04:30pm-04:45 pm | **Design and Evaluation of Patient-Specific Laryngeal Implants**<br>Michael McPhail, Justin Hintze, Cheryl Myers, David Lott |
| 04:45pm-05:00 pm | **A New Technique for Measuring the Source Waveform of (Tracheo)Esophageal Speakers: Two-Point Transfer Matrix Method**<br>Andressa B. Otto, Andrey R. da Silva, Ana Carolina Ghirardi, Elisa G. Vieira |
| 05:00pm-05:15 pm | **Physiologic Differences and Subgroupings for Normal Vocal Output: A Dynamic Systems Perspective**<br>Daniel Croake, Richard Andreatta, Joseph Stemple |
| 05:15pm-05:30 pm | **Diagnostic Value of Articulation Neuromotor Instability for Neurodegenerative Disease Detection and Rating**<br>Andrés Gómez-Rodellar, Pedro Gómez-Vilda, Jiri Mekyska, Irena Rektorova, Victoria Rodellar-Biarge, Agustín Álvarez-Marquina |
| 05:30pm-05:45 pm | **Roundtable Discussion** |
| | ***Adjourn*** |

*Thursday, August 02, 2018*

| | |
|---|---|
| 08:30am-09:00 am | Registration |
| 09:00am-09:05 am | Welcome |
| **Keynote**<br>09:05am-09:45 am | **Vocal Rehabilitation – Lessons Learned from a 30-Year Analysis of Publications in the Journal of Voice**<br>Mara Behlau |
| 09:45am-10:00 am | **Global and Local Differentiation of Human Vocal Fold Fibroblast Genotype**<br>Alexander Foote, Ziyue Wang, Christina Kendziorski, Susan Thibeault |
| 10:00am-10:15 am | **The Effect of Protein Coating on Epithelial Barrier Integrity, Cell Proliferation, and Cell Physiology in Primary Culture of Vocal Fold Epithelial Cells**<br>Emily Kimball, Carol Xu, Lea Sayce, Bernard Rousseau |
| 10:15am-10:30 am | **Human Vocal Fold Epithelial Cells and their Immortalization**<br>Xia Chen, Susan Thibeault |
| 10:30am-10:45 am | **Roundtable Discussion** |
| 10:45am-11:15 am | ***Coffee Break*** |
| 11:15am-11:30 am | **Human Vocal-Fold Architecture and Mechanical Properties: 3D Multiscale Characterization and Modelling**<br>Thibaud Cochereau, Alberto Terzolo, Lucie Bailly, Laurent Orgéas, Nathalie Henrich Bernardoni, Sabine Rolland Du Roscoat, A. McLeer-Florin |
| 11:30am-11:45 am | **Geometric Morphometrics Applied to Laryngeal Functional Morphology**<br>Tobias Riede, Heather Borgard, Karen Baab, Bret Pasch |
| 11:45am-12:00 pm | **Effects of the Vocal Tract on Phonation Threshold Pressure**<br>Lewis Fulcher, Alexander Lodermeyer, George Kaehler, Michael Doellinger, Stefan Becker, Stefan Kniesburges |
| 12:00pm-12:15 pm | **Radiation Efficiency for Long-Range Vocal Communication in Mammals and Birds**<br>Ingo Titze, Anil Palaparthi |
| 12:15pm-12:30 pm | **Roundtable Discussion** |
| 12:30pm-01:30 pm | ***Lunch (provided to registrants)*** |
| **Keynote**<br>01:30pm-02:10 pm | **Flow Structure Interactions in Phonation: What Do We Really Know and Why Does It Matter?**<br>Sid Khosla |
| 02:10pm-03:00 pm | **NIDCD Funding of Voice Research**<br>Lana Shekim |
| 03:00 pm-05:30pm | **Poster Session / Coffee Break** |
| | |
| 06:30pm-08:30pm | **Gala Dinner (*if chosen on registration*)** *Kellogg Center* |

## *Thursday, August 02, 2018: 3:00-5:30 – POSTER SESSION (odd)*

| # | ***Titles and Authors*** <br> ***Odd-numbered posters presentation from 3:00-4:15*** |
|---|---|
| 1 | **Validation of a Set of Recurrence Quantification Measurements in Discrimination of Normal and Deviated Synthesized Voices** <br> Leonardo Lopes, Mara Behlau |
| 3 | **Application of Automatic Speech Recognition Technology for Describing Intelligibility Deficit in Dysphonic Speech** <br> Keiko Ishikawa, Teksong Eap, Marissa Happ, Lauren Kaiser |
| 5 | **Characterization of Acute Exposure to Glucocorticoid Steroids in Human and Rabbit Primary Vocal Fold Epithelial Cells** <br> Carol Xu, Emily Kimball, Lea Sayce, Bernard Rousseau |
| 7 | **A Preliminary Comparison of the Expression and Localization of Integral Epithelial Proteins in Human and Rabbit Vocal Folds** <br> Gary Gartling, Lea Sayce, Emily Kimball, Shintaro Sueyoshi, Jennifer Brandley, Bernard Rousseau |
| 9 | **Harmonic Voice Quality Parameters of Rough and Modal Vowels** <br> Wolfgang Wokurek, Manfred Pützer |
| 11 | **Steadiness of Singing Scales by Untrained Adult Females** <br> Michelle Bretl, Ronald Scherer |
| 13 | **Intraglottal Pressures for Glottal Polyps** <br> Leila Rahiminejad Ranjbar, Abdollah Afjeh, Ronald Scherer |
| 15 | **Flow-Structure Interaction Simulation of a Canine Laryngeal Model** <br> Weili Jiang, Xudong Zheng, Qian Xue, Xiaojian Wang, Liran Oren, Charles Farbos De Luzan, Ephraim Gutmark, Sid Khosla |
| 17 | **Automation Support Using Non-Invasive Measures of Operator Vocalization (ASIMOV)** <br> Seth Elkin-Frankston, Miriam Van Mersbergen, Bethany K. Bracken, Calvin Leather |
| 19 | **A Computational Study of Depth of Vibration into Vocal Fold Tissues** <br> Anil Kumar Palaparthi, Simeon Smith, Ted Mau, Ingo Titze |
| 21 | **Auditory Discrimination of Different Types of Sonified Synthesized Glottal Area Waveforms** <br> Philipp Aichinger, Imme Roesner, Franz Pernkopf, Jean Schoentgen |
| 23 | **Amniotic Fluid Assists in Separation of Murine Vocal Folds** <br> Vlasta Lungova, Tadeas Lunga, Susan Thibeault |
| 25 | **Immediate Effect of Electrostimulation in Semioccluded Vocal Tract Exercises (SOVTs) in Chillán Teachers.** <br> Jazmín Pérez-Serey, Alejandro Núñez, Francisca Carrasco, Sebastián Dinamarca, Carolina Postel, Yenny Soto, Bárbara Toro |
| 27 | **Effects of a Mask Rim Leak on AC Airflow Measurement** <br> Nicholas May, Ronald Scherer |
| 29 | **Measures of Voice Onset Time: A Methodological Study** <br> Rebecca Rae, Ronald Scherer |
| 31 | **Investigation of Acoustic Dimension Use in Dialect Production: Machine Learning of Sonorant Sound for Modeling Acoustic Cues of African American Dialect** <br> Meisam Arjmandi, Laura Dilley, Suzanne Wagner |
| 33 | **Accelerometer-Based Aerodynamic Measures for Subjects with Phonotraumatic Hyperfunction: An In-Laboratory Study** <br> Víctor M. Espinoza, Jarrad H. Van Stan, Daryush Mehta, Robert E. Hillman, Matías Zañartu |

## *Thursday, August 02, 2018: 3:00-5:30 – POSTER SESSION (even)*

| # | ***Titles and Authors*** <br> ***Even-numbered posters presentation from 4:15-5:30*** |
|---|---|
| 2 | **Aeroacoustic Sound Generation During Phonation – Analysis of Acoustic Analogies for a Hybrid Acoustic PIV Approach** <br> Alexander Lodermeyer, Matthias Tautz, Eman Bagheri, Stefan Becker, Michael Döllinger, Stefan Kniesburges |
| 4 | **Influence of Spatial Camera Resolution on Glottal Area Waveform Parameters in HSV Imaging** <br> Patrick Schlegel, Melda Kunduk, Michael Döllinger |
| 6 | **Vocal Fold Vibratory Outcomes Following High Dose of Glucocorticoids** <br> Maria Powell, Lea Sayce, Emily Kimball, Shintaro Sueyoshi, Gary Gartling, Bernard Rousseau |
| 8 | **Expression of Inflammatory Cytokines and Junctional Proteins in Rabbit Vocal Folds Following Methylprednisolone Treatment** <br> Shintaro Sueyoshi, Lea Sayce, Emily Kimball, Gary Gartling, Carol Xu, Bernard Rousseau |
| 10 | **Virtual Histology with Multimodal Nonlinear Imaging and Nano-Computed Tomography for Quantitative Analysis of Vocal Fold Structure and Injury** <br> Ksenia Kolosova, Alexei Kazarine, Huijie Wang, Almoaidbellah Rammal, Rui Tahara, Karen M. Kost, Nicole Y. K. Li-Jessen, Luc Mongeau, Paul W. Wiseman |
| 12 | **Adductory Vocal Fold Kinematic Trajectories During Conventional Speed Vs. High-Speed Videoendoscopy** <br> Manuel E. Diaz-Cadiz, Victoria Mckenna, Jennifer Vojtech, Cara Stepp |
| 14 | **Imaging and Quantifying Dehydration and Rehydration in Vocal Fold Tissue Layers** <br> Renee King, Kevin Steed, Ana Rivera, Jonathan Wisco, Susan Thibeault |
| 16 | **Effect of Subglottic Stenosis on Acoustical Output of Synthetic Vocal Fold Models** <br> Benjamin Hilton, Scott Thomson |
| 18 | **Phonation Aeroacoustic Source Strengths** <br> Feimi Yu, Gage Walters, Michael Krane, Lucy Zhang |
| 20 | **Emergent Interactions Among the Vocalization Subsystem Triad: A Dynamic Systems Approach** <br> Dan Croake, Richard Andreatta, Joseph Stemple |
| 22 | **Quantitative Comparisons of Coronal Plane Geometry in Phonating Human Vocal Folds In-Vivo Using VCSEL Optical Coherence Tomography** <br> Lily Y. Chen, Giriraj K. Sharma, Christopher Badger, Ellen Hong, Li-dek Chou, Swathi Rangarajan, Theodore H. Chang, Christian H. Barnes, William B. Armstrong, Sunil P. Verma, Ram Ramalingam, Zhongping Chen, Brian J-F. Wong |
| 24 | **Amniotic Fluid for Treatment of Vocal Fold Injury in an In-Vivo Rabbit Model** <br> Michael Christensen, Jenny Pierce, Phil Lee, Kristine Tanner, Marshall Smith |
| 26 | **Accuracy of the Commercially Available Eventide Eclipse to Perturb Auditory Feedback of Fundamental Frequency** <br> Elizabeth Heller Murray, Ashling Lupiani, Katherine Kolin, Cara Stepp |
| 28 | **Tahrir Patterns in a Professional Iranian Classical Singer** <br> Mahdi Tahamtan, Ronald Scherer |
| 30 | **Primo Passagio: Measures Associated with Different Interpretations Sung by an Elite Soprano Performer** <br> Raymond Diaz, Ronald Scherer, Jennifer Rowley |
| 32 | **The Relation Between Vocal Fry and Room Acoustics Among Bilingual English-Spanish Speakers** <br> Lady Catherine Cantor-Cutiva, Pasquale Bottalico, Eric Hunter |
| 34 | **Auditory-Perceptual Judgments of Listener Comfort for Esophageal and Tracheoesophageal Speakers** <br> Mojgan Farahani, Philip Doyle, Vijay Parsa |

*Friday, August 03, 2018*

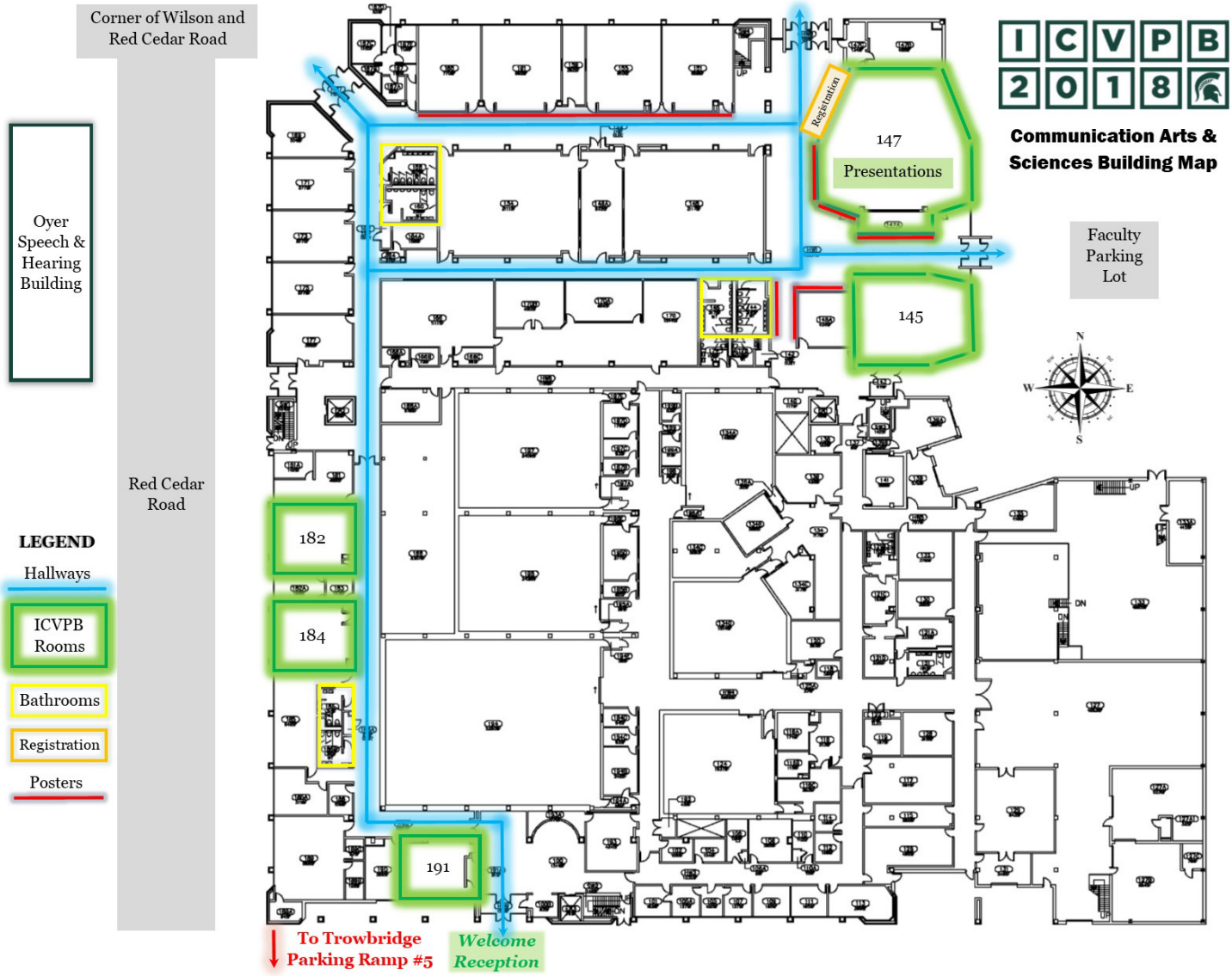
| | |
|---|---|
| 08:30am-09:00 am | Registration |
| 09:00am-09:15 am | Welcome |
| 09:15am-09:30 am | **Effect of Methylprednisolone Treatment on Rabbit Vocal Fold Physiology**<br>Lea Sayce, Emily Kimball, Gary Gartling, Maria Powell, Shintaro Sueyoshi, Steven Schneeberger, Jennifer Brandley, Carol Xu, Bernard Rousseau |
| 09:30am-09:45 am | **Reliability of Relative Fundamental Frequency and Conventional Acoustic and Aerodynamic Measures in Individuals with Healthy Voices**<br>Yeonggwang Park, Cara Stepp |
| 09:45am-10:00 am | **An Investigation of Vocal Fatigue Using a Dose-Based Vocal Loading Task**<br>Zhengdong Lei, Laura Fasanella, Nicole Li-Jessen, Luc Mongeau |
| 10:00am-10:15 am | **Differences in Voice Parameters in Those Who Experience a Biological Stress Response and Those Who Do Not**<br>Brittany Perrine, Ronald Scherer |
| 10:15am-10:30 am | **Modeling Dynamics of Connected Speech in Time and Frequency Domains with Application to ALS**<br>Hamzeh Ghasemzadeh, Jeff Searl |
| 10:30am-10:45 am | **Roundtable Discussion** |
| 10:45am-11:15 am | **Coffee Break** |
| 11:15am-11:30 am | **Validation of a Non-Invasive System to Observe Glottal Opening and Closing: External Photoglottograph (EPGG)**<br>Angelique Amelot, Darshan Sathiyanarayanan, Shinji Maeda, Kiyoshi Honda, Lise Crevier-Buchman |
| 11:30am-11:45 am | **Analysis of the Aero-Acoustic Sound Sources of Phonation in a Synthetic Larynx Model**<br>Stefan Kniesburges, Alexander Lodermeyer, Matthias Tautz, Michael Döllinger, Stefan Becker |
| 11:45am-12:00 pm | **The Influence of High-Speed Videoendoscopy Data Quality on Reduced-Order Model Parameters Estimated Using Bayesian Inference**<br>Jonathan Deng, Paul Hadwin, Sean Peterson |
| 12:00pm-12:15 pm | **3D-High-Speed Videoendoscopy – Preliminary Findings**<br>Michael Doellinger, Anne Schuetzenberger, Rita Patel, Marion Semmler |
| 12:15pm-12:30 pm | **Glottal Attack Time in Connected Speech**<br>Maryam Naghibolhosseini, Dimitar D Deliyski, Stephanie RC Zacharias, Alessandro de Alarcon, Robert F Orlikoff |
| 12:30pm-12:45 pm | **Roundtable Discussion** |
| 12:45pm-1:00 pm | **Summary and Adjourn** |
| 02:00pm-3:30 pm | ***Optional Lunch and MSU Walking Tour*** |
| 04:00pm-5:00 pm | ***Optional Museum Tours*** |

# Venue

All sessions of the 2018 ICVPB take place in the College of Communication Arts and Sciences Building, which is located at Michigan State University in East Lansing. [404 Wilson Rd, East Lansing, MI 48824]

ICVPB participants can park just south of the building, where there is a parking ramp with public parking. A weekly parking pass can be obtained for a fee at the registration desk.

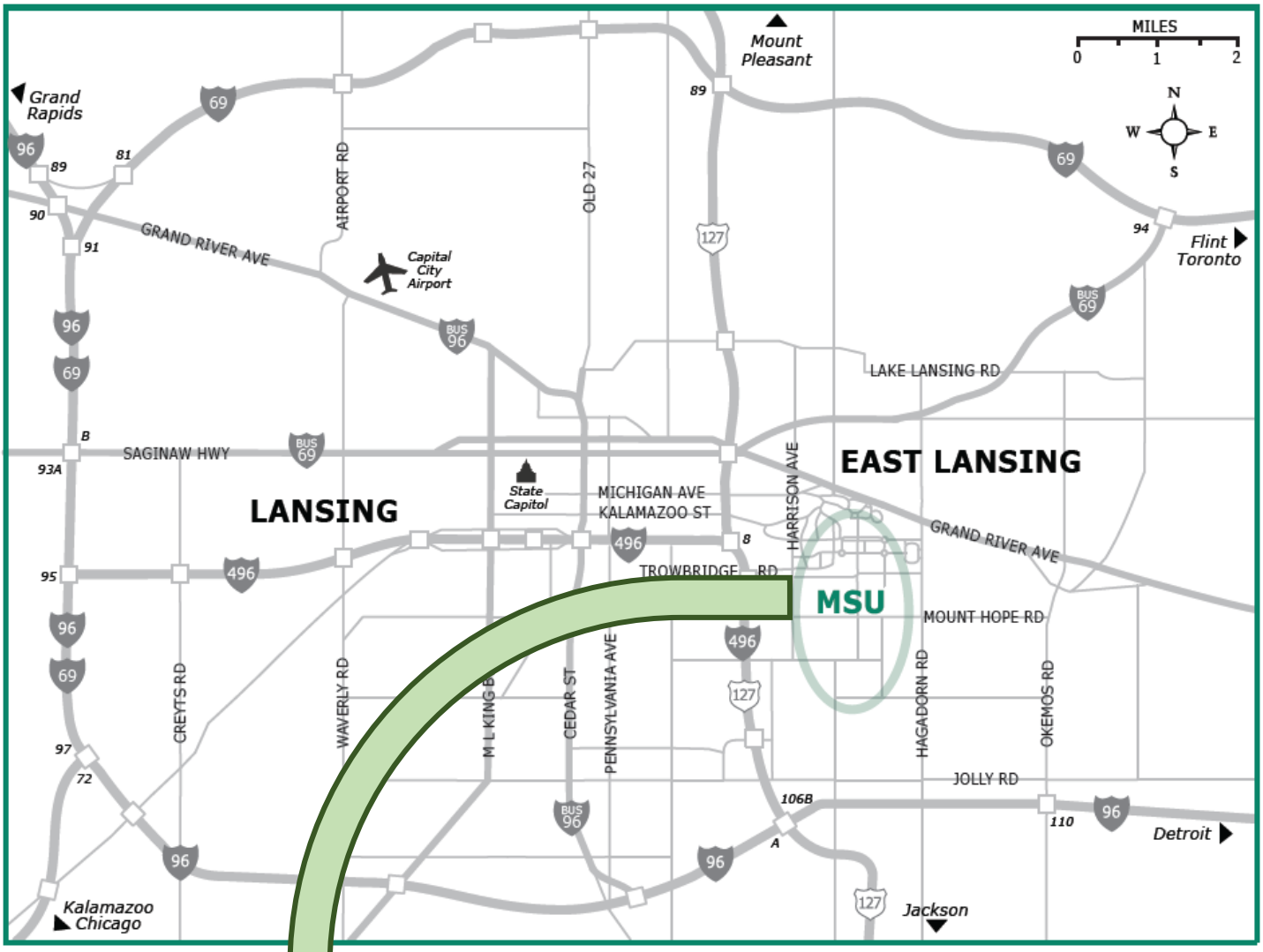
While lunch will be provided to registrants, there is a food court located directly north of the conference venue (about a 10-minute walk) in the International Center.



# Map

## LANSING AREA

MICHIGAN STATE UNIVERSITY



**DRIVING DIRECTIONS TO MICHIGAN STATE**

**From Traverse City or Points North via I-75**
Proceed south on I-75 to US-127 near Grayling. Proceed south on US-127 to East Lansing. Take the Trowbridge Road exit. Follow Trowbridge Road east to Michigan State University.

**From Detroit or Points East via I-96**
Proceed west on I-96 to northbound US-127; follow US-127 north to East Lansing. Take the Trowbridge Road exit. Follow Trowbridge Road east to Michigan State University.

**From Grand Rapids or Points West via I-96**
Proceed east on I-96 to eastbound I-69. Proceed east on I-69 to southbound US-127. Take US-127 south to East Lansing. Take the Trowbridge Road exit. Follow Trowbridge Road east to Michigan State University.

**From Flint or Points East via I-69**
Proceed southwest on I-69 to southbound US-127. Take US-127 south to East Lansing. Take the Trowbridge Road exit. Follow Trowbridge Road east to Michigan State University.

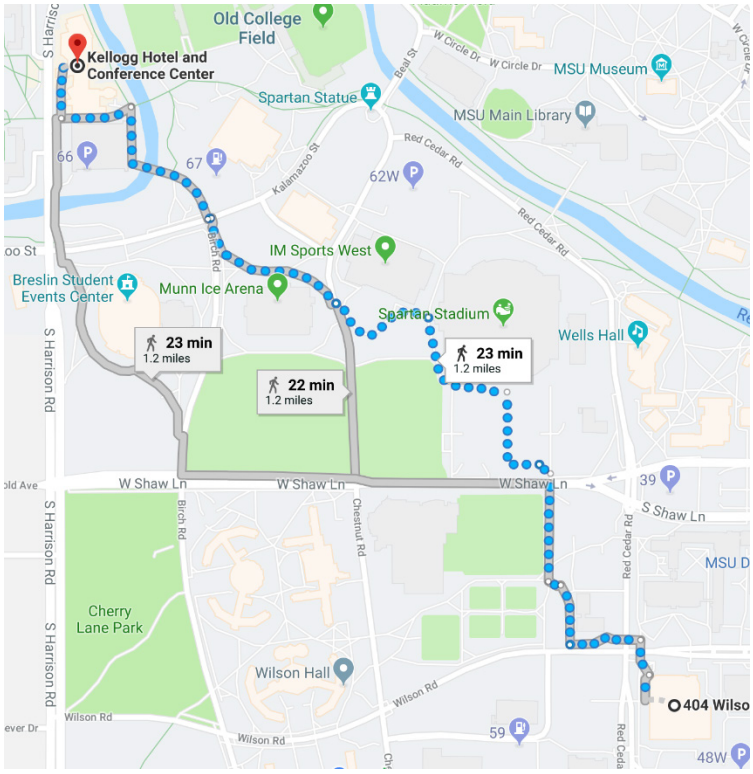
**From Kalamazoo or Points South via I-69**
Proceed east on I-94 to northbound I-69. Take I-69 north to Lansing. Take I-496 east to the Trowbridge Road exit. Follow Trowbridge Road east to Michigan State University.

**From Jackson or Points South via US-127**
Proceed north on US-127 to East Lansing. Take the Trowbridge Road exit and continue east to Michigan State University.

# Social

**ICVPB 2018 Welcome Reception** will take place on Tuesday July 31 from 6:30pm-8:00pm at the conference venue. All ICVPB and Pre-Conference registrants are welcome. Light refreshments will be provided.

**ICVPB 2018 Gala Dinner** will take place Thursday August 2 from 7:00pm-8:30pm. Cocktails begin at 6:30pm. The dinner will be at the Kellogg Center's Big Ten Room - (219 S Harrison Rd, East Lansing, MI 48824. See the map to the right. The dinner is an additional option to conference registration and can be added at the registration desk.




**Following the Conference, on Friday July 3rd, we have organized three excursions. All are free for registrants (RSVP required).**

**MSU Campus Tour: 2pm -** At the conclusion of the conference, there is an optional campus tour. For those that RSVP, a lunch will be provided. Join us for a 60 - 75min campus walking tour (*rain or shine!*). This walking tour will cover approximately 2 miles of our park-like campus and include stops at academic buildings, historic locations on campus, the MSU library – and of course, we'll walk by the Spartan Stadium!

**MSU MUSEUM: 4pm -** The MSU Museum is a public steward for nearly a million objects and specimens in Anthropology, Natural Science, Folk Arts, and History from around the world. The collections provide the foundation for research, education, and outreach both locally and internationally. The Museum reaches a broad and diverse audience through strong, varied, and accessible collections, field- and collections-based research, public service and education programs, traveling exhibits, and innovative partnerships with local, regional, statewide, national, and international organizations and institutions.

**ELI AND EDYTHE BROAD ART MUSEUM: 4pm-** The Eli and Edythe Broad Art Museum at Michigan State University (MSU Broad) is a dynamic contemporary art museum that serves as both a teaching institution and a cultural hub for East Lansing and the region. The museum was designed by Pritzker Prize-winning architect Zaha Hadid and named in honor of Eli and Edythe Broad.