

PHONANIUM'S 3RD INTENSIVE COURSE ON

## CLINICAL ASSESSMENT OF ACOUSTIC VOICE SIGNALS

OCTOBER 14-15, 2019 FORT WORTH, TEXAS, USA TEXAS CHRISTIAN UNIVERSITY

### TWO-DAYS COURSE (OCTOBER 14-15, 2019)

### 'Amusetics' ... unblocking paths to high-standard acoustic methods in clinical voice assessment

During this first day, basic information on sound recording quality and choice of microphone, sound level calibration, clinically interesting aspects of the acoustic signal, and reliabillity and validity of acoustic voice measures, will be presented in the context of clinical voice assessment.

[Goal] **To know** about clinical voice acoustics ...

## From theory to 'Praatice' ... clinical voice acoustics with Phonanium on your own laptop

During this optional second day, theory will be replaced by practice: working with the basic function of the program Praat★, interpretation of narrow-band spectrograms and cepstrograms, installation of and training with Phonanium's Clinical Voice Lab★, calibration of your audio recording system.

[Goal] ... and also **to do** clinical voice acoustics.

### Maximum number of participants: 15.

Course fee (including registration for two-day course, download of Phonanium's Clinical Voice Lab, and syllabus with slides in PDF): \$ 610°.

Acoustic methods offer objective solutions for (a) the documentation of most vocal phenomena both quantitatively and qualitatively, (b) the measurement of specific aspects of voice signals, and consequently (c) the tracking of voice across time and interventions. As such, acoustic voice analysis continues to form one of the corner stones in clinical as well as scientific voice assessment, regardless of the speech-language pathology or laryngology area. Furthermore, not only in those with a voice disorder, but also persons with hearing impairment, dysarthria, laryngectomy, head and neck cancer, etc. can encounter problems in both the production and the sound of the airborne voice signal. **Phonanium** has therefore developed several clinical software tools for acoustic analysis of voice to be at all voice and speech clinicians' disposal.

This **intensive course** is designed to give participants theoretical insights in as well as practical mastery over acoustic voice assessment using Phonanium's tools in the program Praat. There will be presentations, live demonstrations, hands-on workshops on software, and laptop configurations.

Measurement tools

Vocal fundamental frequency
Vocal intensity level
Vocal range estimation
Spectrography
Cepstrography
Acoustic Voice Quality Index
Dysphonia Severity Index

Reliability tools

Speech-to-noise ratio / Voice-to-noise ratio Intensity level calibration

Support tool

Personal information - New file

All tools

Phonanium's Clinical Voice Lab

<sup>★</sup> The program Praat from Paul Boersma and David Weenink (Institute of Phonetic Sciences, University of Amsterdam, The Netherlands) is free available and can be downloaded at www.praat.org.
◆ Phonanium's Clinical Voice Lab encorporates a set of voice analysis tools that work as plug-ins in the program Praat and that can be purchased at www.phonanium.com.

### DAY 1

# MONDAY – OCTOBER 14, 2019 ACOUSTICS ... UNBLOCKING THE PATH TO HIGH STANDARD ACOUSTIC METHODS IN CLINICAL VOICE ASSESSMENT.

8.00 <sup>AM</sup>	8.30 <sup>AM</sup>	Saying hello — registration — coffee.
8.30 <sup>AM</sup>	8.45 <sup>AM</sup>	Warming up: a complete acoustic voice assessment with Phonanium plug-ins in the program Praat.
8.45 <sup>AM</sup>	9.00 <sup>AM</sup>	Clinical voice assessment anno 2018 and the role of acoustic methods.
9.00AM	10.30 <sup>AM</sup>	The sound recording chain: criteria for high-quality voice/speech recordings conditio sine qua non!
10.30 <sup>AM</sup>	11.00 <sup>AM</sup>	Morning break – coffee + pastry.
11.00 <sup>AM</sup>	11.45 <sup>AM</sup>	How loud is your voice? Toward a method for calibrating sound level measures in the voice clinic.
11.45 <sup>AM</sup>	12.30 <sup>PM</sup>	Clinically fascinating facets of the acoustic voice signal.
12.30 <sup>PM</sup>	1.30 <sup>PM</sup>	Lunch break.
1.30 <sup>PM</sup>	1.45 <sup>PM</sup>	Software options for acoustic voice analysis: advantages versus disadvantages.
1.45 <sup>PM</sup>	3.00 <sup>PM</sup>	Hold on a minute what about reliability and validity related to acoustic voice measures?
3.00 <sup>PM</sup>	3.30 <sup>PM</sup>	Afternoon break – coffee + pastry.
3.30 <sup>PM</sup>	5.00 <sup>PM</sup>	Speed-dating with the program Praat exercises with some basic functions of the program Praat.
5.00PM	6.00 <sup>PM</sup>	The 'Acoustic Voice Quality Index' story toward measuring dysphonia severity.
6.00PM		Closing the day.
ORGANIZING COMMITTEE – Christopher Watts (PhD, CCC-SLP) from Texas Christian		

University, and Kristie Knickerbocker (MS, CCC-SLP) from a tempo Voice Center.

INSTRUCTOR – Youri Maryn (PhD) works as a clinical speech-language pathologist at the European Institute for ORL-HNS (Otorhinolaryngology & Head and Neck Surgery, Sint-Augustinus Hospital GZA, Wilrijk, Belgium – www.neus-keel-oor.be). He also teaches on acoustic phonetics at University of Ghent and on voice disorders at Université Catholique Louvain and Ghent University College. He is post-doctoral researcher at University of Antwerp. He serves as board member of the Flemish Association for Speech-Language Therapists. He publishes on voice disorder management and acoustics, and he speaks at (inter)national voice meetings. His specific topics of interest are clinical voice assessment, voice disorder management, voice/speech acoustics and oral versus nasal speech production. In 2017, he founded Phonanium (www.phonanium.com), a company dedicated to providing all voice and speech pathologists with information on and software tools for clinical acoustic analyses.

### **ONLINE REGISTRATION**

www.phonanium.com/courses/
... on a 'first come, first served' basis

Registration deadline: September 01, 2019

### LOCATION

Texas Christian University (TCU)

Smith Entrepreneur's Hall

Room 1520B

2805 West Lowden, Fort Worth, TX 76129

CE

It will be offered for 8 hours of CE

LANGUAGE English

CONTACT INFORMATION +32 (0)478 377454 info@phonanium.com

LATEST COURSE INFORMATION www.phonanium.com/courses/

### DAY 2

# TUESDAY – OCTOBER 15, 2019 FROM THEORY TO 'PRACTICE' ... CLINICAL VOICE ACOUSTICS ON YOUR OWN LAPTOP!

08.00 <sup>AM</sup>	08.30 <sup>AM</sup>	Registration – coffee.
08.30 <sup>AM</sup>	08.45 <sup>AM</sup>	Recapitulation any questions after day 1?
08.45 <sup>AM</sup>	10.30 <sup>AM</sup>	Calibration of intensity level measures on the participants' own sound recording systems.
10.30 <sup>AM</sup>	11.00 <sup>AM</sup>	Morning break – coffee + pastry.
11.00 <sup>AM</sup>	12.15 <sup>PM</sup>	What you see is what you hear spectrographic explorations in the peculiarities of voiced sounds!
12.15 <sup>PM</sup>	1.15 <sup>PM</sup>	Lunch break.
1.15 <sup>PM</sup>	3.00PM	Workshop: "Phonanium Clinical Voice Lab" on your own laptop.
3.00 <sup>PM</sup>	3.30 <sup>PM</sup>	Afternoon break – coffee + pastry.
3.30 <sup>PM</sup>	4.45 <sup>PM</sup>	Workshop: "Phonanium Clinical Voice Lab" on your own laptop.
4.4504	E OODM	Debriefing: be honest will you be able
4.45 <sup>PM</sup>	5.00 <sup>PM</sup>	to continue on your own?