



PHONANIUM'S 1<sup>ST</sup> INTENSIVE COURSE ON

# CLINICAL ASSESSMENT OF ACOUSTIC VOICE SIGNALS

04/02/2019–05/02/2019  
WILRIJK (ANTWERP, BELGIUM)

**ONE-DAY COURSE (04/02/2019)**

**TWO-DAYS COURSE (04/02/2019 AND 05/02/2019)**

## '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 reliability and validity of acoustic voice measures, will be presented in the context of clinical voice assessment.

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

Maximum number of participants: **60**.

Course fee (including registration for one-day course, syllabus with slides, food and drinks): **€ 120**.

## 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<sup>★</sup>, interpretation of narrow-band spectrograms and cepstograms, installation of and training with Phonanium's Clinical Voice Lab<sup>†</sup>, 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, syllabus with slides, food and drinks): **€ 540**.

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. Depending on the choice of registration (one day or two days), 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

★ 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](http://www.praat.org).

† **Phonanium's Clinical Voice Lab** incorporates a set of voice analysis tools that work as plug-ins in the program Praat and that can be purchased at [www.phonanium.com](http://www.phonanium.com).

## DAY 1

MONDAY – 04 FEBRUARY 2019

# AMUSE ACOUSTICS ... UNBLOCKING THE PATH TO HIGH-STANDARD ACOUSTIC METHODS IN CLINICAL VOICE ASSESSMENT.

- 08.00 > 08.30 *Saying hello – registration – coffee.*  
Warming up: a complete acoustic voice assessment with Phonanium plug-ins in the program Praat.
- 08.30 > 08.45  
Clinical voice assessment anno 2018 ... and the role of acoustic methods.
- 08.45 > 09.00  
The sound recording chain: criteria for high-quality voice/speech recordings ... conditio sine qua non!
- 10.30 > 11.00 *Morning break – coffee + pastry.*  
How loud is your voice? Toward a method for calibrating sound level measures in the voice clinic.
- 11.00 > 11.45  
Clinically fascinating facets of the acoustic voice signal.
- 11.45 > 12.30  
*Lunch break.*  
Software options for acoustic voice analysis: advantages versus disadvantages.
- 13.30 > 13.45  
Hold on a minute ... what about reliability and validity related to acoustic voice measures?
- 13.45 > 15.00  
*Afternoon break – coffee + pastry.*  
Speed-dating with the program Praat ... exercises with some basic functions of the program Praat.
- 15.30 > 17.00  
The 'Acoustic Voice Quality Index' story ... toward measuring dysphonia severity.
- 17.00 > 18.00  
*Closing the day.*

**INSTRUCTOR – Yuri 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](http://www.neus-keel-oor.be)). He also teaches on acoustic phonetics at University of Ghent and on voice disorders at 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](http://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/](http://www.phonanium.com/courses/)

... on a 'first come, first served' basis

**Registration deadline: 23 December 2018**

## LOCATION

European Institute for ORL-HNS

Otorhinolaryngology & Head and Neck Surgery, Sint-Augustinus Hospital GZA, Building Oosterveld 4<sup>th</sup> floor, Oosterveldlaan 24, 2610 Antwerp (Wilrijk), Belgium

## LANGUAGE

English or Dutch depending on the audience (international or local, respectively)

## CONTACT INFORMATION

+32 (0)3 4433672

[info@neus-keel-oor.be](mailto:info@neus-keel-oor.be) – [info@phonanium.com](mailto:info@phonanium.com)

## LATEST COURSE INFORMATION

[www.neus-keel-oor.be](http://www.neus-keel-oor.be) – [www.phonanium.com](http://www.phonanium.com)

## HOTEL/HOUSING RECOMMENDATIONS

We work with Firean hotel ([www.hotelfirean.com](http://www.hotelfirean.com)), but send us an e-mail to request additional information on housing/hotels

## ANTWERP

Fashion, musea, cathedral, diamonds, Rubens, central train station, shopping, nightlife, maritime ... [www.visitantwerpen.be](http://www.visitantwerpen.be)

## DAY 2

TUESDAY – 05 FEBRUARY 2019

# FROM THEORY TO 'PRACTICE' ... CLINICAL VOICE ACOUSTICS ON YOUR OWN LAPTOP!

- 08.00 > 08.30 *Registration – coffee.*  
Recapitulation ... any questions after day 1?
- 08.30 > 08.45  
Calibration of intensity level measures on the participants' own sound recording systems.
- 08.45 > 10.30  
*Morning break – coffee + pastry.*  
What you see is what you hear ... spectrographic explorations in the peculiarities of voiced sounds!
- 10.30 > 11.00  
*Lunch break.*  
Workshop: "Phonanium Clinical Voice Lab" on your own laptop.
- 11.00 > 12.15  
*Afternoon break – coffee + pastry.*  
Workshop: "Phonanium Clinical Voice Lab" on your own laptop.
- 12.15 > 13.15  
Debriefing: be honest ... will you be able to continue on your own?
- 13.15 > 15.00  
*Closing the day.*
- 15.00 > 15.30  
*Closing the day.*
- 15.30 > 16.45  
*Closing the day.*
- 16.45 > 17.00  
*Saying goodbye.*