

PHONANIUM'S 4TH INTENSIVE COURSE ON

CLINICAL ASSESSMENT OF ACOUSTIC VOICE SIGNALS

JULY 14–15, 2020 TAMPA (FL), USA UNIVERSITY OF SOUTH FLORIDA

IN COLLABORATION WITH SOUTH TAMPA VOICE THERAPY LLC

TWO-DAYS COURSE

July 14, 2020

'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 explain** clinical voice acoustics ...

July 15, 2020

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

During this second day, theory will be replaced by practice: 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 apply 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): **\$ 625**•.

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 |

★ 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.
• This price in \$ for the two-days course corresponds with € 560 according to the money exchange rate on January 07th 2020.

DAY 1 TUESDAY – JULY 14, 2020 ACOUSTICS ... UNBLOCKING THE PATH TO HIGH-STANDARD ACOUSTIC METHODS IN CLINICAL VOICE ASSESSMENT.

| 8.00 ^{am} | 8.30 ^{4M} | Saying hello – registration – coffee. |
|---------------------|---------------------|--|
| 8.30 ^{am} | 8.45 ^{AM} | Warming up: a complete acoustic voice assessment with Phonanium plug-ins in the program Praat. |
| 8.45 ^{am} | 9.00 ^{am} | Clinical voice assessment anno 2020 and the role of acoustic methods. |
| 9.00 ^{am} | 10.30 ^{am} | The sound recording chain: criteria for high- quality voice/speech recordings conditio sine qua non! |
| 10.30 ^{am} | 11.00 ^{am} | Morning break – coffee + pastry. |
| 11.00 ^{am} | 11.45 ^{am} | How loud is your voice? Toward a method for calibrating sound level measures in the voice clinic. |
| 11.45 ^{am} | 12.30 ^{pm} | Clinically fascinating facets of the acoustic voice signal. |
| 12.30PM | 1.30pm | Lunch break. |
| 1.30 ^{pm} | 1.45 ^{pm} | Software options for acoustic voice analysis: advantages versus disadvantages. |
| 1.45 ^{pm} | 3.00 ^{pm} | Hold on a minute what about reliability and validity related to acoustic voice measures? |
| 3.00pm | 3.30PM | Afternoon break – coffee + pastry. |
| 3.30PM | 5.00pm | Speed-dating with the program Praat exercises with some basic functions of the program Praat. |
| 5.00 ^{pm} | 6.00 ^{pm} | The 'Acoustic Voice Quality Index' story toward measuring dysphonia severity. |
| 6.00pm | | Closing the day. |
| ORGA | NIZING COMMIT | TEE – Supraja Anand (PhD, SLP) of the Communication Sciences and Disorders |

ORGANIZING COMMITTEE – Supraja Anand (PhD, SLP) of the Communication Sciences and Disorders department from the University of South Florida (Tampa, FL, USA), and Cara Bryan (MA, CCC-SLP) of South Tampa Voice Therapy LLC (Tampa, FL, USA).

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.

DISCLOSURES - Financial - Youri Maryn is owner of Phonanium (Lokeren, Belgium) and receives royalty payments from the sale of voice analysis products. He is employed by the Department of Otorhinolaryngology & Head and Neck Surgery, Sint-Augustinus Hospital; serves as professor at the University College Ghent, University of Ghent and Université Catholique Louvain, for which he receives salaries. He is executive board member of the Vlaamse Vereniging voor Logopedisten (Flemish Association of Speech-Language Therapists) for which he also receives a salary. – Nonfinancial - He is post-doctoral researcher at the University of Antwerp and received no compensation for this. – Course Content Disclosure – This course will focus exclusively on Praat software and Phonanium's plug-ins for acoustic analyses of voice signals, and will not include information on other similar or related products that might be used for the same analyses.

ONLINE REGISTRATION

www.phonanium.com/courses/ ... on a 'first come, first served' basis Open: March 01, 2020 Deadline: June 01, 2020

> LOCATION University of South Florida Tampa, FL, USA

> > CE

This two-days course will be offered for **1.4 ASHA CEUs** (Advanced level, Professional area)



The University of South Florida is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech-language pathology

and audiology. See course information for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.

LANGUAGE

English

CONTACT INFORMATION +32 (0)478 377454 – <u>info@phonanium.com</u> LATEST COURSE INFORMATION www.phonanium.com/courses/

DAY 2

WEDNESDAY JULY 15, 2020 FROM THEORY TO 'PRACTICE' ... CLINICAL VOICE ACOUSTICS ON YOUR OWN LAPTOP!

| 08.00 ^{am} | 08.30 ^{AM} | Registration – coffee. |
|--|--|---|
| 08.30 ^{am} | 08.45 ^{am} | Recapitulation any questions after day 1? |
| 08.45 ^{am} | 10.30 ^{am} | Calibration of intensity level measures on the participants' own sound recording systems. |
| 10.30 ^{am} | 11.00 ^{am} | Morning break – coffee + pastry. |
| 11.00 ^{am} | 12.15 ^{PM} | What you see is what you hear spectrographic explorations in the peculiarities of voiced sounds! |
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| 12.15pm | 1.15 ^{pm} | Lunch break. |
| <i>12.15рм</i> 1.15рм | 1.15 ^{pm} 3.00 ^{pm} | Lunch break. Workshop: "Phonanium Clinical Voice Lab" on your own laptop. |
| | | Workshop: "Phonanium Clinical Voice Lab" on |
| 1.15 ^{pm} | 3.00 ^{PM} | Workshop: "Phonanium Clinical Voice Lab" on your own laptop. |
| 1.15 ^{pm} 3.00 ^{pm} | 3.00 ^{PM} 3.30 ^{PM} | Workshop: "Phonanium Clinical Voice Lab" on your own laptop. <i>Afternoon break – coffee + pastry.</i> Workshop: "Phonanium Clinical Voice Lab" on |