

**FREQUENCY
FOLLOWING
RESPONSE
WORKSHOP** **2022**

BARCELONA

8-10 June 2022 - University of Barcelona
Catalonia, Spain

Wednesday 8th June 2022

15.00 Registration. *Escales d'Honor.*

16.45 Welcome / Opening Remarks. *Aula Magna.*

Carles Escera - *University of Barcelona, Catalonia, Spain.*

Nina Kraus - *Northwestern University, Evanston, USA.*

17.00 Keynote lecture 1. *Aula Magna.* Chair: Natàlia Gorina-Careta

The multilayered FFR: Insights from studies of bilingual populations.

Erika Skoe - *University of Connecticut, USA.*

18.00 Reception. *Jardí de la Diputació.*

Thursday 9th June 2022

Morning sessions (Talks 1-4)

Chair: Jordi Costa Faidella – University of Barcelona, Catalonia, Spain.

9.00 Talk 1. *Aula Magna.*

A Multidisciplinary Review of Frequency Following Response Analysis with Machine Learning Decoding Models.

Isabelle Arseneau-Bruneau – *McGill University, Montreal, Canada.*

9.30 **Talk 2.** *Aula Magna.*

Contribution of primary auditory cortex to scalp-recorded envelope following responses in the macaque monkey.

Tobias Teichert - *University of Pittsburgh, USA.*

10.00 **Coffee break with exhibitors & Poster session.** *Galeria del Claustre.*

10.45 **Talk 3.** *Aula Magna.*

Individual differences in frequency-dependent fluctuations in the FFR amplitude.

Luan Tonelli - *University of Connecticut, USA.*

11.15 **Talk 4.** *Aula Magna.*

Frequency-following response is altered by brain state but not by sleep events.

Hugo R. Jourde - *Concordia University, Canada.*

11.45 **Break.** *Galeria del Claustre.*

12.00 **Keynote lecture 2.** *Aula Magna.* Chair: Sonia Arenillas-Alcón

Frequency-Following Responses to Speech: Neural Sources and Modulatory Influences.

Bharath Chandrasekaran - *University of Pittsburgh, USA.*

13.00 **Lunch.** *Jardí Central.*

Afternoon sessions (Talks 5-8)

Chair: Clement François – Aix-Marseille University, Aix-en-Provence, France.

14.00 **Talk 5.** *Aula Magna.*

Frequency following response deficits in infants with hyperbilirubinemia: A model for diagnostic utility of the FFR.

Gabriella Musacchia – *University of the Pacific, San Francisco, USA.*

14.30 **Talk 6.** *Aula Magna.*

Detection of abnormal neural encoding of speech sounds at birth using the frequency-following response.

Teresa Ribas-Prats – *University of Barcelona, Catalonia, Spain.*

15.00 Break. *Galeria del Claustre.*

15.15 Talk 7. *Aula Magna.*

Selective brain response to voices at four months of age.

Roberta Pia Calce – *University of Louvain, Belgium.*

15.45 Talk 8. *Aula Magna.*

Neural plasticity induced by music begins before birth: evidence from neonatal frequency-following responses.

Sonia Arenillas-Alcón – *University of Barcelona, Catalonia, Spain.*

16.15 Poster Session. *Galeria del Claustre (until 17.00).*

Friday 10th June 2022

Morning sessions (Talks 9-12)

Chair: Warren Michael Henry Bakay – University of Manchester, Manchester, United Kingdom.

9.00 Talk 9. *Aula Magna.*

Musical and linguistic implications of the modulatory role of the SLC6A4 and DRD4 genes on subcortical pitch encoding.

Marc Via - *University of Barcelona, Catalonia, Spain.*

9.30 Talk 10. *Aula Magna.*

Auditory brainstem response evoked by speech sound as a predictor of behavioural performance in children with Auditory Processing Disorders, a pilot study.

Amineh Koravand - *University of Ottawa, Canada.*

10.00 Coffee break with exhibitors & Poster session. *Galeria del Claustre.*

10.45 Talk 11. *Aula Magna.*

Pitch tracking measurements: Exploring the most informative predictor for musical, phonological and audiological skills.

Gianinna Puddu-Gallardo - *University of Barcelona, Catalonia, Spain.*

11.15 Talk 12. *Aula Magna.*
Peripheral frequency following responses in young and older participants using electrocochleography.
Miguel Temboury Gutiérrez – *Technical University of Denmark (DTU), Denmark.*

11.45 Break. *Galeria del Claustre.*

12.00 Keynote lecture 3. *Aula Magna (virtual).* Chair: Carles Escera
Teaching an old dog new tricks: New innovations in the frequency-following response (FFR) to characterize online changes in brainstem-cortical function necessary for robust speech perception.
Gavin Bidelman - *University of Memphis, USA.*

13.00 Lunch. *Jardí Central.*

Afternoon sessions (Talks 13-14)

Chair: Marta Puertollano

14.00 Talk 13. *Aula Magna.*
Rapid Responses to Auditory Frequency Change, Its Magnitude and Direction – from Brain Processing to Action.
Amos David Boasson – *The Hebrew University of Jerusalem, Israel.*

14.30 Talk 14. *Aula Magna.*
The brain automatically categorizes discrete auditory emotion expressions.
Siddharth Talwar - *University of Louvain, Belgium.*

15.00 Break. *Galeria del Claustre.*

15.15 Workshop / Quiz. *Aula Magna.* Chair: Teresa Ribas-Prats
Analyzing the FFR.
Jen Krizman – *Northwestern University, Evanston, USA.*

16.15 Coffee break. *Galeria del Claustre.*

16.30 Round table. *Aula Magna.*

Chair:

Nina Kraus - *Northwestern University, Evanston, USA.*

Participants:

Manuel Sánchez Malmierca - *University of Salamanca, Spain.*

Jordi Costa-Faidella - *University of Barcelona, Catalonia, Spain.*

Erika Skoe - *University of Connecticut, USA.*

Bharath Chandrasekaran - *University of Pittsburgh, USA.*

18.00 Closing Remarks. *Aula Magna.*

Carles Escera - *University of Barcelona, Catalonia, Spain.*

Nina Kraus - *Northwestern University, Evanston, USA.*

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