



# ISLE-NCCR-B&C *Joint Colloquium*



TUESDAY, April 30th, 2024 | 12:15-13:30 | 13:30-16:30: 1-1 talks

## Pr Marina Laganaro

*Faculty of Psychology and Educational Science, University of Geneva*

### “From Lexical Selection to Articulation Across the Lifespan”

Campus Biotech, H8-01-D  
9, chemin des Mines 1202 Genève  
& on Zoom :

<https://unige.zoom.us/j/62694444617?pwd=T2wzQWNMMk9DTEVXZFhwrW94RXEwQT09>

Meeting ID: 626 9444 4617

Passcode: 617330



**Universität  
Zürich** UZH

#### Abstract

Speaking involves selecting and producing about 150 words per minute, at least in young adult speakers, but speed of word selection and production follows a U-shaped/bell-shaped curve from childhood to ageing adults. After introducing the current state of the art on the brain dynamics of the mechanisms underlying referential and inferential word production in typical young adults (de Zubizaray & Piai, 2019; Indefrey, 2011; Laganaro, 2023), I will discuss the changes underlying language and speech production across the lifespan. In particular, based on behavioral and EEG/ERP studies involving school-age children, adolescents and different adult age groups, I will show that (1) word production processes become adult-like only in adolescence both at the level of lexical selection (Atanasova et al, 2021;2022) and of motor speech processes (Lancheros et al., 2023), and (2) neurophysiological modifications precede the behavioral decline in word production in older adults (Krethlow et al., 2024), in line with the interpretation that the lexical-semantic reorganization in mid-adulthood influences the maintenance of language skills longer than for other cognitive functions.