The realization of sounds in the speech signal is highly variable. In this talk, I will review some of our recent studies documenting variation in the production of French vowels. Factors of very different nature are examined and interaction of such factors is found to be the most informative. These include low-level biomechanical factors (neighbouring articulatory demands, spatio-temporal constraints), style and speech task-dependent effects, and higher-level organizational principles, such as prosodic structure. The data is based on large natural speech corpora, on the observation of pathological variation in Speech Motor Disorders, and on cross-sectional data of adults from young to old age. Our results provide further support to the idea that variation in the speech signal is in no way random. Variation in the speech signal, and more interestingly the modulation of variation, reflects motoric and linguistic constraints and it can index speaker-specific characteristics.

Everyone is cordially invited.