Prof Carolyn McGettigan
UCL Department of Speech, Hearing and Phonetic Sciences
Chandler House
2 Wakefield Street
London WC1N 1PF

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To Whom It May Concern

I am delighted to invite Dr Christine Nussbaum to visit UCL Speech, Hearing and Phonetic Sciences on the Postdoc Program funded by DAAD.

Dr Nussbaum has recently published a landmark paper in *Trends in Cognitive Neurosciences* that proposes a cognitive framework within which to understand perceptions of voice naturalness. For the DAAD program, she has outlined a series of experimental studies to test this framework, by measuring how experience with atypical voices – specifically, synthetic voices – might impact on listeners' perceptions of naturalness and other person characteristics from audio voice samples.

I will act as Dr Nussbaum's mentor at UCL for this research visit. My lab and department are perfectly placed to host Dr Nussbaum for the proposed fellowship. The London Vocal Communication Laboratory (VoCoLab: https://www.vocolab.net/) comprises a multi-site team of academics, research fellows and research students across UCL and Queen Mary University of London, using methods from experimental psychology, speech science, and engineering to address questions about how humans express and perceive information in voices. Between the two PIs - myself and Dr Nadine Lavan - we have published several of the most influential theoretical and empirical works on voice identity perception and expression of the last decade. We have a specific line of interest in the perception of synthetic and AI-generated voices, and I have recently completed a Mid-Career Fellowship funded by the British Academy that investigated human perception of voice clones (i.e. AI-generated audio "deepfakes" of human identities). My fellowship work did not specifically address naturalness perception, and I am eager to work with Dr Nussbaum to ask new questions about synthetic voice perception through her DAAD award. We will provide Dr Nussbaum with advice and experience in: linguistic and phonetic considerations for stimulus selection, acoustic processing of voices, and approaches to large-scale online data collection. Dr Nussbaum will also participate in our regular lab meetings, where we pitch research plans, present our findings, and discuss latest developments in the field.

UCL Speech, Hearing and Phonetic Sciences (SHaPS) is a globally-renowned centre of excellence for the study of human vocal communication, bringing together researchers from phonetics and linguistics, experimental psychology and neuroscience, as well as engineering and computer science. Crucial for Dr Nussbaum's planned research activities, we have an institutional licence for Gorilla Experiment Builder to support online data collection. Our world-leading MSc programme in Language Sciences has recently launched a successful strand in Speech Technology, and I would suggest that Dr Nussbaum will benefit from auditing relevant modules on this strand during her visit (e.g. PALS0039 Introduction to Deep Learning for Speech and Language Processing; PALS0051 Advanced Speech Data Processing in R). We also run a weekly research seminar series – the UCL Speech Science Forum – and I propose that Dr Nussbaum presents at this meeting during her stay at UCL. As a member of the broader Division of Psychology and Language Sciences at UCL, Dr Nussbaum will also have the opportunity to attend regular seminars in Experimental Psychology, the Institute of Cognitive Neuroscience, and more. In practical terms, Dr Nussbaum will have access to a work station, computing and library facilities, and the wider libraries, museums and study spaces of UCL.

I am confident that a research stay at UCL as part of DAAD's Postdoc Program will be of great benefit to Dr Nussbaum's personal career development, and will enhance our own experience through our shared research enterprise. On behalf of the lab and the department, I express my strongest support for Dr Nussbaum's application.

Yours faithfully,

Prof Carolyn McGettigan
Chair in Speech and Hearing Sciences