PhD Position in Digital Interventions for Literacy Development – SUPSI and UNIGE (Locarno and Geneva, Switzerland)

Applications for a fully funded PhD position in the field of digital interventions for literacy development in between the CC School, Social and Educational Needs at SUPSI of prof. Angela Pasqualotto and the Brain and Learning Lab of Prof. Daphné Bavelier at the UNIGE/Campus Biotech. The position is part of the NCCR Evolving Language and of collaboration with Pr. Silvia Brem at UZH, focusing on the development, adaptation, and efficacy of digital tools for literacy acquisition.

Position Details

- Start date: September 1st, 2025 preferred
- **Location**: Department of Education and Learning (SUPSI) in Locarno, and Campus Biotech/University of Geneva. The successful candidate will be registered via the University of Geneva and spend most of their time in Locarno.
- Salary according to the salary scale for PhD students from the Swiss National Science Foundation (SNSF) [Salary ranges, guidelines for employees in SNSF-funded projects]

• **Duration**: 4 years

• **Supervision**: Prof. Angela Pasqualotto (SUPSI, <u>angela.pasqualotto@supsi.ch</u>) and Prof. Daphne Bavelier (University of Geneva, daphne.bavelier@unige.ch)

Research Focus & Responsibilities

- Develop and validate an accurate, reliable, adaptive, and automated measure of reading and reading-related abilities for web- or tablet-based applications in at least two languages (i.e., Italian and French)
- Investigate the efficacy of adaptive video game-based tools in enhancing reading skills based on children's cognitive and linguistic profiles.
- Conduct large-scale experimental studies to assess reading acquisition and brain plasticity across Italian, French, and (if permitted) German.
- Collaborate with interdisciplinary teams in cognitive science, linguistics, and educational technology.
- Disseminate findings through publications and conference presentations.

About the Project & NCCR Evolving Language

The position is part of Digital Interventions Project (WP Learning Trajectories) within the NCCR Evolving Language, a Swiss National Center of Competence in Research.

The NCCR aims to create a new discipline, Evolutionary Language Science, by integrating expertise from the humanities, social sciences, computational sciences, natural sciences, and medicine. The research focuses on the past and future of language, investigating how language evolves and how it can be supported through technological interventions.

This project seeks to obtain large-scale data on reading acquisition and the neuroplasticity associated with literacy learning across multiple languages of varying orthographic transparency. Our tools will help overcome the constraints of traditional assessments and training methods by:

- (i) enabling large-scale recruitment with reduced costs and time compared to in-lab studies,
- (ii) including a more representative sample of research participants, reducing geographical limitations, and
- (iii) actively seeking inclusion of under-represented groups such as low-SES participants.

A defining feature of this research effort is leveraging digital technologies to enhance literacy intervention dissemination worldwide. The Digital Interventions initiative serve as the central hub of an international consortium on reading interventions, coordinating with international experts.

Requirements

- Master's degree in Psychology, Cognitive Science, Linguistics, Logopédie/Speech Therapy or a related field.
- Familiarity with programming skills (e.g., R, Python, or similar) needed.
- Proven background in psycholinguistics and/or literacy development and/or speech therapy
- Background in educational/clinical interventions a plus.
- Fluency in Italian and English (written and spoken).
- Fluency in French or in German a plus.
- Experience with experimental design and familiarity with Human Computer Interaction methods are a plus.

What We Offer

- A stimulating research environment in an internationally recognized group.
- Opportunities for collaboration and networking in cognitive and educational research.
- Competitive salary and funding for conference travel.
- NCCR supports exchange with other departments in its network. The NCCR network offers excellent opportunities and strong support for career development.

The NCCR supports gender balance and inclusiveness.

Application Process

- Deadline: May 15th, 2025
- Required documents at the time of the submission:
 - Curriculum vitae (CV)
 - o Cover letter detailing research interests and fit for the position
 - Academic transcripts (list of completed exams)
 - Work certificates
- Additional documentation (such as reference letters, a criminal record certificate or a copy of an identity document) may be requested at a later stage.
- Applications should be submitted via online form. More information here: https://www.supsi.ch/bando3001
- For inquiries, please contact Prof. Daphne Bavelier (daphne.bavelier@unige.ch) or Prof. Angela Pasqualotto (angela.pasqualotto@supsi.ch). We look forward to your application!