

Project Title: **Multiple-Deficits in Chinese Developmental Dyslexia Ameliorated by Behavioral Remediation: Behavioral and Neuroscience Evidence**

Project Summary:

The study explored whether the multiple deficits in Chinese developmental dyslexia result from neurological deficits or social and/or educational causes. The study demonstrated a cross-language transference following phonological strategies in English can ameliorate Chinese dyslexic children's phonological awareness when learning to read Chinese. The results of the study suggested how and to what extent their behavioral and neural deficits could be ameliorated by behavioral remediation focused on auditory processing and oral language training similar to non-Chinese children. The same behavioral and neural deficits that characterize Cantonese-speaking dyslexic children who live in Hong Kong are found in Putonghua-speaking children who live in Beijing, potentially it could help to explain the origin of Chinese dyslexia, and show whether dyslexia results from neurological, cultural, social and/or educational causes. The results also suggested that the significance of phonological and auditory processing skills in early reading success is not restricted to alphabetic languages, but also applies to the non-alphabetic Chinese language. The results could help nurses and clinicians and health and educational professionals with early detection and the determination of remediation programs most appropriate for Chinese children with dyslexia to learn Chinese and to learn English as a second language in Hong Kong and China.