Applicant
Dr. Raphael F. de Souza, McGill University

E-mail Address
raphael.desouza@mcgill.ca

Project Title
Better oral health for a healthy cognition: investigation of a new pathway

Project Summary
Previous studies show that good oral health is key for general health. They suggest that gum disease or many lost teeth raise the risk of early dementia, Alzheimer’s and other neurological diseases. We believe that a certain aging-related factor is vital for this association: the degeneration of nerves that secrete a substance called acetylcholine. They are notably prone to degenerate with aging, control the production of saliva, and are involved in the onset and progress of dementia. Thus, we will investigate whether adults (age: 45 years or +) with dry mouth and other oral problems also have poorer memory/mental performance. We will also check if the action of acetylcholine-producing neurons can explain this association. This information will help dentists to realize their role in preventing dementia. We may also identify new ways to prevent or to slow dementia.

Keywords
Cognition, Cholinergic System, Oral Health