

## **Focus on Faculty #75**

### **Belinda Nicolau**



Dr. Belinda Nicolau, a Canada Research Chair in Life Course Oral Epidemiology, is a Professor in the Faculty of Dentistry and an Associate Member of the Gerald Bronfman Department of Oncology and the Department of Epidemiology, Biostatistics and Occupational Health at McGill University. She obtained her DDS degree from the Federal University of Paraná, Brazil and an MSc in Dental Public Health followed by a PhD in Epidemiology at University College London, London, UK. After a brief stint at the Oral Pathology Department, Eastman Dental Institute also at University College London, she pursued a postdoctoral fellowship in cancer epidemiology at McGill. In the spring of 2005, Dr Nicolau took up a faculty position as an Assistant and then Associate Professor at INRS-Institut Armand-Frappier, after which she moved to McGill University in December 2011.

Dr. Nicolau's main research interest lies in the life course approach to chronic oral diseases including oral and oropharyngeal cancers. She is interested in examining how multiple exposures (environmental, behavioural, biological) during an individual's life affect the risk of chronic oral diseases later in life. To do so, she uses the life course framework, which considers that past life experience of individuals or a group of people shapes current patterns of disease, while acknowledging that these experiences are shaped by the social, economic and cultural context in which one grows and lives. In epidemiology, the life course approach is used to investigate the long-term effects on disease risk of physical, social and psychosocial exposures at different stages of individuals' lives including intrauterine life, infancy, childhood, adolescence and adulthood as well as across generations. The approach seeks to understand causal links between exposures and outcomes, taking into consideration the importance of time (duration of an exposure) and timing (when the exposure happens) in disease development.

To specifically investigate oral and oropharyngeal cancers, Dr Nicolau set up an international hospital case control study in Brazil, India and Canada investigating the aetiology of head and neck cancer using the life course approach - The HeNCe Life study (Head & Neck Cancer Life Course study). In addition to being innovative in terms of risk factor measurement and analytical approach, the HeNCe study enables comparison of the role of different risk factors on oral and

oropharyngeal cancer development across cultures with distinct social norms and behaviours and in countries with large variation in the incidence of these cancers. Intriguing results from this study include the discovery that, although HPV infection is a major risk factor for oropharyngeal cancers in Canada, HPV infection does not seem to play a role in the aetiology of these cancers in a population in the South of India.

Outside of science, Dr Nicolau enjoys outdoor activities including biking and hiking, travelling, reading, listening to music and spending time with family, friends and pets (her own cat as well as the dogs of family and friends).

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