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Amyloid disease and skin: From protein bioinformatics to keratinocyte toxicity

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Misfolded and aggregated polypeptides (agPs) are involved in the pathology of various amyloidogenic diseases and associated manifestations such as neurodegeneration and, in some cases, effects on skin. Epidermal deposition and toxicity, including skin denervation, has been observed. This presentation will focus mainly on agPs such as transthyretin, and their toxicity towards a human epidermoid cell line; toxic effects include cellular pro-oxidative reactions, and disruption of cell membrane structure and function. Biophysical and bioinformatics analyses of agPs will also be presented in an attempt to relate their structural changes to toxicity and disease.

Biography

Vieira A completed his PhD at the University of Alberta, Canada and Postdoctoral studies in California, and is currently Associate Professor, Biomedical Physiology, Simon Fraser University, Canada. He has over 80 publications including research papers in major international journals, and has served as reviewer or editor for over 30 publications.

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