

KARTHEYAENE JAYAPRAKASH graduated with a Bachelor of Dental Surgery degree from The Tamil Nadu Dr M.G.R. Medical University, Chennai, India in 2008. She was awarded a Master of Science degree in Molecular Medical Biology, from Örebro University in 2011. She has been a doctoral student at Örebro University, School of Health and Medical Sciences, since 2012, under the supervision of Professor Torbjörn Bengtsson.

This thesis deals with the innate immune responses of leukocytes to periodontopathogen *Porphyromonas gingivalis*, a natural member of the oral microbiome and is indicated as key species in the pathogenesis of periodontitis. Hematogenous spread is a plausible explanation for *P. gingivalis* dissemination to distal sites such as atherosclerotic plaques, leg ulcers and placental tissues. The events that occur between leukocytes and *P. gingivalis* is of vital interest as this could dictate the presence and viability of *P. gingivalis* in the other sites. Leukocytes such as monocytes, neutrophil are also phagocytes and they express a plethora of germ-line coded pattern recognition receptors like toll-like receptors, NOD and protease-activated receptors. These receptors recognize different structural signatures of *P. gingivalis* that results in the activation of various pro-inflammatory signalling pathways. In this thesis, we elucidate the role of *P. gingivalis* interaction with these phagocytes in contribution to inflammation.

ISSN 1652-4063
ISBN 978-91-7529-122-2

KARTHEYAENE JAYAPRAKASH Monocyte and Neutrophil Inflammatory Responses ...

2016

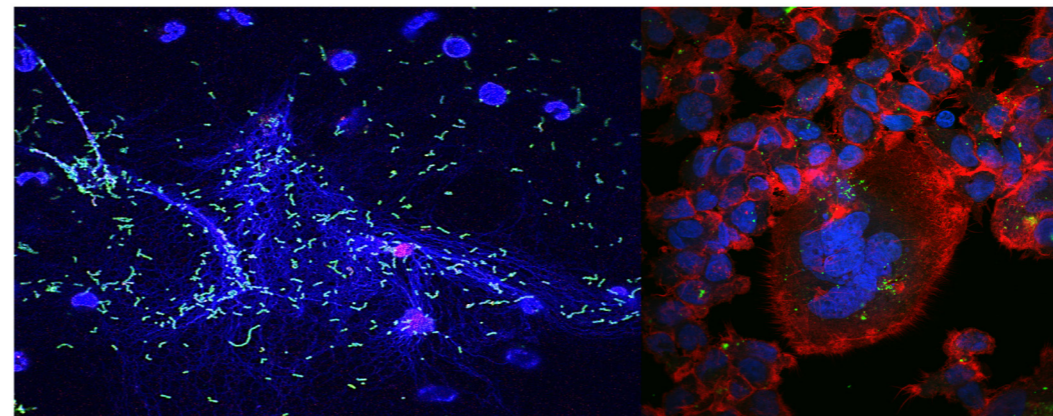


Doctoral Dissertation

Monocyte and Neutrophil Inflammatory Responses to the Periodontopathogen *Porphyromonas gingivalis*

KARTHEYAENE JAYAPRAKASH

Medical Science with a specialisation in Biomedicine



KARTHEYAENE JAYAPRAKASH Monocyte and Neutrophil Inflammatory Responses ...