



**SEZIN GÜNALTAY** completed her bachelor degree in Biology, Middle East Technical University, Ankara, Republic of Turkey. After, she continued her studies in Master of Science degree in medicine major in Örebro University. She performed her master's thesis under supervision of Prof Elisabeth Hultgren Hörnquist and graduated at 2011. She remained in Prof Elisabeth Hultgren Hörnquist's mucosal immunology group for her PhD studies, as well.

Microscopic colitis (MC), a common cause of chronic non-bloody diarrhea, comprises collagenous colitis (CC) and lymphocytic colitis (LC). MC is a subtler type of inflammatory bowel disease (IBD), compared to ulcerative colitis (UC) and Crohn's disease (CD). The main clinical symptoms of MC are chronic watery diarrhea, abdominal pain, and weight loss. MC is commonly seen in elderly females. The studies in this thesis investigated innate and adaptive immune responses in the colonic mucosa of MC patients, also comparing patients with active (CC and LC) and with histopathological remission (CC/LC-HR).

Altogether, dysregulated innate and adaptive immune responses were detected in MC patients, both in active and histopathologically in remission patients. These results increase the knowledge of MC pathogenesis by showing changes in Toll-like receptor (TLR) signaling regulators, enhanced chemokine and their receptor expressions involved in a mixed immune cell infiltrations, and selectively expanded T cell clones in CC and LC patients.

ISSN 1652-4063  
ISBN 978-91-7529-118-5



SEZIN GÜNALTAY Dysregulated Mucosal Immune Responses in Microscopic Colitis Patients

ÖREBRO  
STUDIES IN  
MEDICINE  
132

2016

Doctoral Dissertation

# Dysregulated Mucosal Immune Responses in Microscopic Colitis Patients

SEZIN GÜNALTAY  
*Medical Science*

SEZIN GÜNALTAY Dysregulated Mucosal Immune Responses in Microscopic Colitis Patients

Örebro Studies in Medicine 132 | ÖREBRO 2016