

CAF/13/02 - Deficiency in Lipoxin (LXA₄) contributes to persistent neutrophilic airways inflammation in non cystic fibrosis bronchiectasis.

Bronchiectasis is a chronic disabling condition, where patients suffer daily cough, sputum production and recurrent chest infections. However, this remains an 'orphan' disease with limited research done to date.

In bronchiectasis, there is an ongoing cycle of infection and inflammation in the airways with more than two-thirds of patients being infected at all times, leading to more inflammation. The inflammation that occurs is meant to clear the infection from the airways but in bronchiectasis this does not occur.

I have done preliminary experiments and have shown that there is lack of the lipid, Lipoxin(LX)A₄, in bronchiectasis. LXA₄ is an important agent that in health switches off this process of inflammation.

This research offers a new non-antibiotic target to help treat patients with bronchiectasis as there are very few effective treatments available for this condition. It would also help develop my laboratory skills to pursue a career in Academic Respiratory Medicine.