LFA/Boehringer Ingelheim COPD Research Fellowship 2016/2017

**Recipient:** Dr Christian Osadnik  
**Value:** $80,000 per annum for 2 years  
**Title:** Towards tailored rehabilitation for COPD exacerbation phenotypes: looking back for the future

**Research Summary**
Acute exacerbations (or flare-ups) of chronic obstructive pulmonary disease (AECOPD) are events characterized by distressing breathlessness and worsened function (e.g. walking, getting dressed). Most people do not return to their previous levels of function after hospital discharge. One of the most effective therapies for this purpose is comprehensive pulmonary rehabilitation (PR) involving whole-body exercise training. PR targets improvement in function by improving muscle weakness (especially in the legs), but not the lungs. Major barriers currently prevent the right patients from receiving the right therapy after AECOPDs. Rates of PR referral, uptake and completion following AECOPD are very low and it is likely some patients may not be ideal candidates for PR.

Critical knowledge is currently lacking upon which to guide implementation of strategies to overcome such issues. Early work in this area has lacked broad vision of the full context influencing how patients (and their support networks) participate in their medical care in the contemporary Australian healthcare setting. This knowledge gap poses significant problems, limiting our ability to improve health outcomes for this important patient group. In order to move forward, we must therefore look back to thoroughly investigate the causes of such problems.

The proposed project aims to comprehensively assess exacerbations and recovery of function from AECOPD to facilitate the development of personalized rehabilitation approaches that consider distinct clinical features. Part A will see patients rigorously evaluated in hospital to identify biological, physical and psychological factors related to their AECOPD and recovery of function 2-months after discharge. Part B will see a subset of patients and their carers undergo interviews to identify themes related to their illness perceptions and motivations for seeking healthcare services. We anticipate important differences will emerge at the time of AECOPD that can help direct future rehabilitation services to better suit the unique needs of patients with AECOPD.