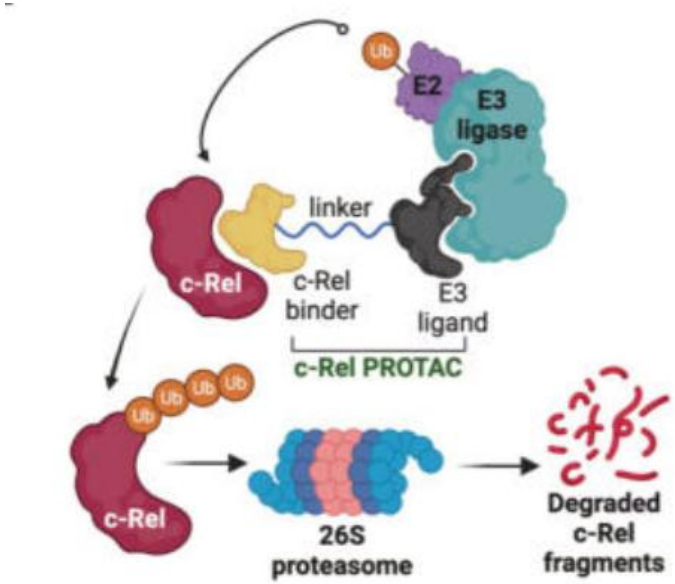
Targeting c-REL to treat inflammatory diseases

The Problem

- Currently no CURE for chronic autoimmune inflammatory diseases
- Current Standard of care have side effects, low/modest efficacy and slow onset of action

The Solution

- Our approach is to develop a product that degrades c-Rel using either a PROTAC or molecular glue strategy.
- Our team will develop a:
  - First-in-class degrader as no c-Rel inhibitors/degraders are in the market
  - Safer strategy as c-Rel expression is restricted to immune cells



Our Program

Progress:

- Shown that long-term and specific genetic loss of c-REL is not detrimental to survival and immune function in mice
- Genetic loss of c-REL prevented or at least substantially diminished pathology in multiple pre-clinical murine models of SLE (Low et al, 2016, O'Reilly et al 2009)
- Optimised c-REL protein production, developed SPR assay and solved crystal structure of C-terminal domain (~1A) for structure-based drug design

Seeking ***partnerships*** for PROTAC/Molecular glue development

Our Team

Prof. John Silke, NF-kb signalling, PROTACs
Dr. Lorraine O'Reilly, NF-kb signalling, Mouse models
Prof. Ian Wicks (Clinician), Patient samples
Prof. Peter Czabotar, Structural biology
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