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IMMUNOLOGY

FROM BENCH TO BEDSIDE
What humans ultimate our progress to the clinic?
Igniting the inflammasome
What have recent studies on NLRs taught us?

► COVER: 'Goodness gracious', inspired by the Review on p31.



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OLIVE LEAVY



SHARON AHMAD

The immune system is a complex network with numerous facets, so research in this field is diverse and challenging. Our understanding of many aspects of the immune system is still incomplete, such as the pathways that lead to the development of antigen-presenting dendritic cells (which are discussed by Ken Shortman and Shalin Naik on page 19) and the molecular basis for the crosstalk between tumour and immune cells in the tumour microenvironment. In this capacity, STAT3 (signal transducer and activator of transcription 3) might act as a link between oncogenesis and immune evasion, as reviewed by Hua Yu, Marcin Kortylewski and Drew Pardoll on page 41.

Other areas of research have flourished in recent years and improving our understanding of the mechanisms of pathogen recognition by innate immune cells, in particular, has been an area of concentrated investigation. On page 31, Sanjeev Mariathasan and Denise Monack discuss which components of the inflammasome (a multi-component complex that regulates the activation of pro-inflammatory cytokines) are involved in the innate immune response to certain bacterial pathogens.

But the question still remains — how do we translate the advances that have been made in our understanding of the immune system to viable human therapies? In the Perspective article on page 77, Ian Sabroe and colleagues provide a thought-provoking insight into the obstacles that impede our progress in translational research and provide a series of strategies to overcome these hurdles.

Finally, we would like to extend our apologies to Ricardo Gazzinelli for incorrectly publishing his name as Roberto Gazzinelli in 'From The Editors' in last month's issue.

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