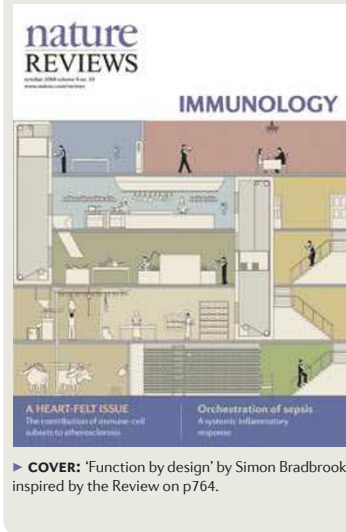




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In the immune system, context is everything. As any cell biologist can appreciate, what a cell 'sees' in its microenvironment determines its function. Although immunologists are fortunate in that we have a readily available source of material from the blood to facilitate the study of immune cells, we are increasingly aware that some of our most valuable lessons can be learned by observing immune responses as they occur *in situ*. By considering aspects of immune responses in the context of the tissue in which they occur, we can better understand how tissue cells or tissue-derived factors in different organs can shape the outcome of these responses.

It is with this in mind that we are pleased to introduce a new series of articles published in this and future issues of *Nature Reviews Immunology* (see Article Series on Tissue-specific immune responses; www.nature.com/nri/series/tissue-specific) that considers the importance of context-dependent cues in shaping immune responses. In the first article in this series (page 764), the authors explain how the microarchitecture of the secondary lymphoid organs defines the ability of the immune system to cope with infectious challenges, providing an excellent example of the reciprocal relationship between anatomical form and organ function. This structure–function relationship is also the inspiration for our cover image this month.

Immune cells must integrate numerous signals from the microenvironment to ensure that their response is appropriate for the cell and tissue context. In the Opinion article on page 816, Lionel Ivashkiv describes how the integration of signals that are downstream of immunoreceptor tyrosine-based activation motif (ITAM)-coupled receptors influences the amplitude and functional outcomes of signalling by other receptors, including cytokine receptors and Toll-like receptors.



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