

IMMUNOLOGY FOUNDATIONS

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Learning objectives

At the end of this two-part module you should:

- Be familiar with important terminology
- Be familiar with the basic mechanisms of normal immune responses
- Understand the difference between innate and adaptive immunity
- Be familiar with the concept of immune tolerance
- Be familiar with autoimmunity and autoimmune disease

Reflective questions

Before taking the module, please think about your current general understanding of immunology. What are the three or four most important questions you have? What are your main areas of uncertainty?

What are the three most important 'take-home messages' you learnt in the module? How will these influence your practice?

Think about your important questions and areas of uncertainty. Have these been answered or resolved? If not, how will you find the answers? If they have been answered or resolved, how will you expand your knowledge and understanding? How do the principles outlined in this module apply to the management of your patients with MS?

Further reading

Cheng Y, Skinner DD, and Lane TE Innate immune responses and viral-induced neurologic disease *Journal of Clinical Medicine* 2018;8:3

Cossu D, Yokoyama K, and Hattori N Bacteria-host interactions in multiple sclerosis *Frontiers in Microbiology* 2018;9:2966-2966

Stephenson J, Nutma E, van der Valk P et al Inflammation in CNS neurodegenerative diseases *Immunology* 2018;154:204-219

Rosenblum D, Remedios KA and Abbas AK Mechanisms of human autoimmunity *The Journal of Clinical Investigation* 2015;125(6):2228-2233