

Defence and Disease

Year and Campus:	2013																									
Coordinator:	Dr Karena Waller																									
Contact:	Dr Karena Waller klwaller@unimelb.edu.au (mailto:klwaller@unimelb.edu.au)																									
Overview:	<p>The human immune system has evolved to control harmful microbes and tumors but can sometimes inflict damage on its host, and as such is a major contributor to human disease. This major examines and integrates immunology, the study of the immune system, with pathological processes and their morphologic, molecular and genetic bases which are associated with immune based disease. The major opens up careers in diagnostics, molecular biology, biotechnology and regulation, research into infectious agents associated with immune based pathology and the various outcomes of the immune system, especially those involved with autoimmunity and immunopathology. It provides a basis for further study in medical and paramedical disciplines.</p>																									
Objectives:	<p>Upon completion of this major students should be able to:</p> <ul style="list-style-type: none"> # understand the development, function and components of the immune system, especially the molecular aspects of immunity to infection, and the basis of immunopathologic conditions including allergies, autoimmune disease and transplantation responses; # apply this knowledge to the determination of strategies which can augment or inhibit the immune response; # describe the principles and procedures involved in isolating and characterising immune cells and their products; # understand the cellular, molecular and genetic bases of the immunopathological conditions described above and how these contribute to morbidity, mortality and the development and clinical use of therapeutic strategies; and # communicate scientific ideas and findings effectively in both oral and written form. 																									
Structure & Available Subjects:	<p>Completion of 50 points of study at Level 3.</p> <p>In order to complete this major, students have to complete the pre-requisite Level 2 subject MIIM20002 Microbes, Infections and Responses.</p>																									
Subject Options:	<p>Second Year:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MIIM20002 Microbes, Infections and Responses</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table> <p>Third Year:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PATH30001 Mechanisms of Human Disease</td> <td>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>MIIM30002 Principles of Immunology</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus one subject from:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PATH30002 Techniques for Investigation of Disease</td> <td>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>MIIM30013 Techniques in Microbiology & Immunology</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus one subject from:</p>		Subject	Study Period Commencement:	Credit Points:	MIIM20002 Microbes, Infections and Responses	Not offered 2013	12.50	Subject	Study Period Commencement:	Credit Points:	PATH30001 Mechanisms of Human Disease	Not offered 2013	12.50	MIIM30002 Principles of Immunology	Not offered 2013	12.50	Subject	Study Period Commencement:	Credit Points:	PATH30002 Techniques for Investigation of Disease	Not offered 2013	12.50	MIIM30013 Techniques in Microbiology & Immunology	Not offered 2013	12.50
Subject	Study Period Commencement:	Credit Points:																								
MIIM20002 Microbes, Infections and Responses	Not offered 2013	12.50																								
Subject	Study Period Commencement:	Credit Points:																								
PATH30001 Mechanisms of Human Disease	Not offered 2013	12.50																								
MIIM30002 Principles of Immunology	Not offered 2013	12.50																								
Subject	Study Period Commencement:	Credit Points:																								
PATH30002 Techniques for Investigation of Disease	Not offered 2013	12.50																								
MIIM30013 Techniques in Microbiology & Immunology	Not offered 2013	12.50																								

	Subject	Study Period Commencement:	Credit Points:
	PATH30003 Frontiers in Human Disease	Not offered 2013	12.50
	MIIM30014 Medical Microbiology: Virology	Not offered 2013	12.50
	PATH30004 Advanced Investigation of Human Disease	Not offered 2013	12.50
	MIIM30003 Medical and Applied Immunology	Not offered 2013	12.50
Links to further information:	http://www.bbiomed.unimelb.edu.au/		
Related Course(s):	Bachelor of Biomedicine		