

Defence and Disease

| Year and Campus: | 2009 | | | | | | |
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| Coordinator: | Dr John Underwood Department of Pathology Email: johnru@unimelb.edu.au Ms Sandra Uren Department of Microbiology and Immunology Email: sandraju@unimelb.edu.au | | | | | | |
| Overview: | 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. | | | | | | |
| Objectives: | Upon completion of this major students should be able to: <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. | | | | | | |
| Subject Options: | <p>Students wanting to complete a major in Defence and Disease will need to complete the following set of subjects:</p> <p>Second Year</p> <p>Microbes: Infections and Responses - <i>this subject includes 2 hours laboratory based practical work per week.</i></p> <p>Third Year</p> <p>Principles of Immunology Mechanisms of Human Disease</p> <p><i>One subject from:</i></p> <p>Techniques in Microbiology and Immunology Techniques for Investigation of Disease</p> <p><i>One subject from:</i></p> <p>Medical and Applied Immunology Consequences of Human Disease Viruses and Other Parasites</p> <p>NB Complete information for third year level subjects will be available in the 2010 Handbook which will be published late 2009.</p> <table border="1" data-bbox="389 1697 1485 1848"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>526-205 Microbes: Infections and Responses</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> | Subject | Study Period Commencement: | Credit Points: | 526-205 Microbes: Infections and Responses | Semester 2 | 12.50 |
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| Links to further information: | http://www.bbiomed.unimelb.edu.au/bachelor_of_biomedicine/course_structure | | | | | | |
| Related Course(s): | Bachelor of Biomedicine | | | | | | |