

Universiteit van Pretoria Jaarboek 2016

Molecular basis of disease 368 (BCM 368)

Kwalifikasie	Voorgraads
Fakulteit	Fakulteit Natuur- en Landbouwetenskappe
Modulekrediete	18.00
Programme	BSc Biochemie BSc Bioteegnologie BSc Fisika BSc Genetika BSc Mensfisiologie BSc Mensgenetika BSc Mikrobiologie BSc Plantkunde BSc. Voeding
Voorvereistes	BCM 251 en BCM 252 en BCM 261
Kontaktyd	1 praktiese sessie per week, 2 lesing per week
Onderrigtaal	Dubbelmedium
Akademiese organisasie	Biochemie
Aanbiedingstydperk	Semester 2

Module-inhoud

Normal and abnormal regulation of the cell cycle: The biochemistry of proliferation, quiescence, senescence, differentiation and apoptosis, illustrated by cancer. Host-Pathogen co-evolution: How adaptive immunity emerged from innate immunity. Infection: Molecular and cellular immunobiochemistry of protection against viral, bacterial and parasitic pathogens. Auto-immunity: Molecular mechanisms of the maintenance and failure of the recognition of foreign in the context of self in the mammalian body. Practical training includes debate on ethics of research on animal and human diseases, experimental design and execution of an immunoassay to test for a biomarker antibody of an infectious disease, tutorials to determine the performance of a diagnostic test for disease, including the principle of ROC curve analysis, positive and negative predictiveness, sensitivity, specificity and accuracy, applications of polyclonal and monoclonal antibodies for characterisation of disease with fluorescence, confocal and electron microscopy, flow cytometry and biosensors.

Die inligting wat hier verskyn, is onderhewig aan verandering en kan na die publikasie van hierdie inligting gewysig word.. Die [Algemene Regulasies \(G Regulasies\)](#) is op alle fakulteite van die Universiteit van Pretoria van toepassing. Dit word vereis

dat elke student volkome vertrouwd met hierdie regulasies sowel as met die inligting vervat in die [Algemene Reëls](#) sal wees. Onkunde betreffende hierdie regulasies en reëls sal nie as 'n verskoning by oortreding daarvan aangebied kan word nie.