Analytical parasitology /

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Monografía

Parasites are of global significance in terms of human an animal health and research is constantly targeted at controlling such infections. In order for this to be effective, detailed analyses of the biology of each species, particularly at the molecular level, must be carried out to promote the development of new therapeutic or diagnostic approaches. This laboratory manual, with detailed background information and practical protocols, will be a useful guide for researchers engaged in many areas of parasitology. Most techniques described can be applied to both helminthic and protozoan parasites, although protocols relevant to individual species are also included. It is largely recommended for postgraduate and postdoctoral scientists and provides procedures for some basic techniques in immunological, microscopical, and molecular analyses along with more specialized schemes to give a multidisciplinary approach to experimental parasitology. Parasite infections are very widespread, nevertheless effective therapeuticals are not yet available. The analysis of the life cycle and the parasite host interactions at the molecular level may help in the search of the "Achilles heel" of a parasite and thus promote the development of new therapeutic approaches. Parasite molecules such as surface antigens, excretory proteins or metabolic enzymes may serve as targets for new diagnostics tests, chemo- or immunotherapeutics or even as candidate vaccine

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