

PhD Program in Translational Medicine and Surgery

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The Research Doctorate in Translational Medicine and Surgery focuses on translational research, aiming at transforming scientific discoveries arising from laboratory, clinical or population studies into new clinical diagnostic and therapeutic tools. Disease mechanisms are studied from the molecular, anatomical and functional point of view, including common pathogenic mechanisms, like inflammation, oxidative stress, endothelial dysfunction, autoimmunity and epigenetic regulation. The research doctorate is organized in two curricula, one in translational medicine and the other in translational surgery.

The translational medicine curriculum is primarily focused on research in the mechanisms of hemostasis and thrombosis and innovative therapeutic approaches to these disorders, on infectious diseases with particular emphasis on the role of inflammation in chronic HIV and other viral disorders, and on metabolic diseases.

The translational surgery curriculum is primarily focused on research on the role of inflammation in surgical disorders, with special reference to surgical gastroenterology and oncology, on neoplastic and non-neoplastic urologic disorders, on neoplastic and non-neoplastic gynaecologic disorders, on vascular, ocular and orthopaedic surgery.

Formal lessons and laboratory and/or clinical research are carried out in the different laboratories and clinics pertinent to the research doctorate.