

The Division of Immunology and Allergy

The Division of Immunology and Allergy (IAL), headed by Professor Giuseppe Pantaleo since the 1st of September 1999, has expanded significantly in recent years in order to meet more efficiently its main objectives, which are, on one hand, patient care through clinical activities and diagnostics, and on the other hand academic activities such as the formation of medical doctors and students as well as experimental and clinical research. In April 2008, the IAL counted a total of 84 staff members, of which approximately 40% were implicated in patient care, while the other 60% were working in research.

The clinical duties focus on outpatient care and intra-hospital patient care. As for outpatient activities of the IAL, over 4200 consultations take place a year, which include patients with allergies, chronic inflammatory diseases or immunodeficiencies. With regard to intra-hospital patient care, the physicians of the IAL act as consultants to the various other departments in order to advice on diagnostic and therapeutical aspects of immunological and immune-related disorders, such as allergies, autoimmune diseases, inflammatory diseases, and immunodeficiencies. These latter activities account for more than 500 consultations a year.

Another of the main activities of the IAL is the diagnostic laboratory, which is accredited by ISO/IEC 17025. The diagnostic laboratory is part of the Department of Pathology and Laboratory Medicine, and carries out specialized, high-performance analyses for the diagnosis and monitoring of numerous allergic, autoimmune and inflammatory pathologies, and immunodeficiencies. Moreover, it also serves as a reference laboratory for the serodiagnosis of human immunodeficiency virus (HIV) infections, for viral hepatitis, and for tests in transplantation medicine. Another function of the diagnostic laboratory is to provide advice on the choice of analysis and on interpretation of laboratory test results. The activity of the diagnostic laboratory has increased by 50% in the past 6 years. In 2007 for example, the total of laboratory tests accounted for 6 million OFAS points.

The research performed by the IAL includes both fundamental as well as applied clinical research. This latter aspect can also be considered as translational research between fundamental research and clinical practice. Such translational research provides scientists the possibility of getting access to patients of different divisions of the hospital through the collaboration between various clinicians. Research conducted at the IAL currently focuses on the functional aspects of T lymphocytes, on antiviral and mucosal immunity, and on the generation of immunological tolerance in allergies and transplant patients. Furthermore, a major new development in vaccine research took place in December 2007 with the

inauguration of the Swiss Vaccine Research Institute (SVRI). The SVRI is the only institute of its kind in Europe, and it is funded in big part by the Bill & Melinda Gates Foundation, whose principal goals are to promote the development of vaccines against three of the major infectious diseases today, which are AIDS, tuberculosis and malaria.

Finally, the IAL has always sought to play a very active role in the pre- and postgraduate education, designed for students, assistant doctors and fully-certified physicians. The IAL acts as an education centre, providing clinical courses for physicians, and laboratory courses for technicians and students.

These above-mentioned four main pillars of the IAL are well interconnected and influence not only all of the IAL's activities but also those of other divisions such as the division of internal medicine, infectious diseases, nephrology, rheumatology, gastroenterology, pediatrics, transplantation medicine and pneumology. This approach promotes the exchange of knowledge between specialists and ensures the realization of the IAL's one and only goal: to keep the patients' well-being and care at the center of our thinking.



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**Centre Hospitalier
Universitaire Vaudois**

*Professor Giuseppe PANTALEO
Division of Immunology and Allergy
Department of Medicine and
Department of Pathology and Laboratory Medicine
Centre Hospitalier Universitaire Vaudois (CHUV)
CHUV BH19-650 - CH-1011 Lausanne
Tél.: +41(0)21 314 10 71 - Fax: +41(0)21 314 10 70
www.immunologyresearch.ch / www.swissvaccineresearch.ch*