

Marie-Paule Lefranc

Members of the WHO Expert Advisory Panel on The International Pharmacopoeia and Pharmaceutical Preparations serving the INN Expert Group

Biography

Marie-Paule LEFRANC (Ph.D.) is Emeritus Professor at the Montpellier University, Member of the Institut Universitaire de France, Chair of immunogenetics and immunoinformatics, and of the Academy of Sciences and Letters of Montpellier. She is Head Emeritus of the Laboratoire d'ImmunoGénétique Moléculaire (LIGM), created with Gérard Lefranc, at Montpellier in 1982, the lab being now located within the Institut de Génétique Humaine, UPR CNRS 1142.

She was born in France, in 1943. She married Gérard LEFRANC in 1968 and they have five children. She received a M.S. in Natural Sciences at the Lille University, a Doctorate in Pharmaceutical Sciences at Paris, and a Ph.D. in Biochemistry, Molecular Biology and Genetics at the Montpellier University. She taught from 1968 to 1976 at Beirut (Lebanon), in charge of the French Embassy Preparatory Center to the Institut National Agronomique and Ecoles Supérieures Françaises d'Agronomie, and, from 1976 to 1982, at the Monastir University (Tunisia), where she contributed to the creation of the Biochemistry Department of the Faculty of Pharmacy. Since 1982, she has been teaching at the Montpellier University.

She has authored over 300 scientific publications in international journals on the molecular immunogenetics of immunoglobulins, T cell receptors, antibody engineering, and in human genetics and immunoinformatics. She contributed to the Encyclopedia of Genetics and Encyclopedia of Systems Biology. She received the Rosen Prize of Cancerology from the Fondation pour la Recherche Médicale in 1988.

She is the founder and director of IMGT®, the international ImMunoGeneTics information system®, <http://www.imgt.org>. By its creation in 1989 (CNRS, Montpellier University), IMGT® marked the advent of immunoinformatics, a new science, which emerged at the interface between immunogenetics and bioinformatics. IMGT® has become the global reference with databases and tools used worldwide by researchers, clinicians (leukemia and lymphoma clonality analysis) and R&D of pharmaceutical societies (therapeutic monoclonal antibody engineering and humanization). The latest development is IMGT/HighV-QUEST, the first and, so far, the only one web portal for the analysis of next generation sequencing (NGS) antigen receptor repertoires in normal (vaccinations, infections, cancers) and pathological (autoimmunity, immunodeficiencies) immune responses. In October 2015, more than 7.66 billions of sequences were analysed by 1505 users from 41 countries (46% users from USA, 34% from EU, 20% from the remaining world).