

Claude Paul Malvy
Professor of Biochemistry
University Paris-Sud

Claude Paul Malvy, aged 64, is Professor of Biochemistry at the University Paris-Sud. In this University he is Director of the Institute for Higher Biomedical Studies) on one side and on the other is in charge of a research group intiled : Artificial Regulation of Gene Expression by Oligonucleotides in a CNRS laboratory. Both IFSBM and the research Group are located inside the Gustave Roussy Institute which is a prestigious european center devoted to treatment and research on cancer. As an initial formation Claude P Malvy has a degree of civil engineering followed by a PhD in pharmacology in Paris VI University (Jussieu). After 4 years devoted to the building and management of a laboratory devoted to the measurement of industrial pollutants in the Toulouse area, he decided to undertake research in life sciences. After one year in a neurobiology CNRS laboratory he shifted to pharmacological research in the cancer field. His first domain of research was the study of DNA intercalating agents. He has shown 20 years ago that alongside their known DNA affinity unexpectedly some of these agents have a strong affinity and reactivity for abasic sites in DNA. This property can be used for the design of DNA repair inhibitors which is an actual topic of interest taking into account the now known importance of mutated repair genes in many cancers . Nevertheless in the hope of a better gene selectivity for antitumor drugs he was then interested in gene inhibition by oligonucleotides and worked on various strategies such as antisense, decoys, triple helix and more recently siRNAs. The limitation of these molecules is their biodegradation and their poor cellular uptake. To overcome these problems strong cooperations have been developped with teams specialised in nanoparticles, peptides, cationic polymers. In the last 10 years he has focused his research on the inhibition of junction oncogenes, created by chromosomal translocation, in Ewing sarcoma and in the papillary thyroïd carcinoma. The targeting of the junction at the RNA level is indeed very specific of the tumor cells. He is author and co-author of 100 publications in international scientific journals. He belonged to the editorial board of the international scientific journal Nucleic Acid Research for more than 10 years until december 2007 and is a member of Oligonucleotide's board. Claude P Malvy is the head of the Institute for Higher Biomedical Studies located in Paris-area. The aim of this Institute is to give a formation in biology and medicine to high standard students with an intial degree in hard sciences (physics, mathematics, informatics, chemistry). The Institute delivers 2 types of degrees according to the type of formation. As a professor he is mainly teaching the basis of cellular biology to students with a degree in hard sciences (physics, mathematics, informatics, chemistry) who undertake a PhD in life sciences. He is also teaching in other fields : DNA transcription, antisense approaches, antitumor drugs.