



SESSION BL 6

TITLE	Structure, function and evolution of luciferases and photoproteins		
CHAIRMANS	1	Vadim Viviani	Brazil
	2	Eugene Vysotsky	Russia
	3	Yoshihiro Ohmiya	Japan
ABSTRACT	<p>The luciferases and photoproteins are the enzymes responsible for the oxidative reactions of luciferins leading to the production of bioluminescence in different organisms. Nowadays, the structure of several luciferases and photoproteins from bacteria, algae, coelenterates, crustaceans and beetles are well known. However, the structural origin and evolution of the catalytic oxygenase function and other functional properties such as bioluminescence colors, remain under debate. Here, recent advances on the understanding of the relationship between structure, function and molecular evolution of different luciferases and photoproteins will be presented.</p>		
KEYWORDS	Luciferases, bioluminescence colors, oxygenases		