



SESSION BIOS 3

TITLE	Luminescence imaging and sensing: current challenges and new avenues		
CHAIRMANS	1	Aldo Roda	Italy
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ABSTRACT	<p>The session will include in vivo and in vitro luminescence imaging with a focus on main trends and new avenues dealing with single cell imaging, imaging of 3D cell models, imaging of subcellular protein translocation, protein-protein interactions, and whole-body imaging. Novel approaches and strategies for intracellular sensing will be also part of the session. The critical assessment and performance comparison among the different luminescence detection principles (e.g., bioluminescence, fluorescence, chemiluminescence) will be particularly encouraged. The implementation of new probes including genetically encoded reporter proteins, split luciferase reporters, BRET-based probes, new red-emitting and multicolour probes for in whole-animal molecular and functional imaging will be addressed.</p> <p>Multi-modality approaches, exploitation of nanomaterials for developing hybrid-imaging constructs and instrumental advances will be also included in the session.</p>		
KEYWORDS	In vivo imaging, luciferase reporter, single cell imaging, bioluminescence, protein-protein interaction, multi-modality imaging		