

The scope of NANO UB-SOURCES is to develop a new generation of broad bandwidth, compact, cost-effective, user-friendly lasers based on photonic device technology that enables significant improvement in early cancer diagnosis and monitoring of retinal diseases that are worldwide leading causes of blindness in the aging population. Modern medicine emphasizes development of diagnostic techniques that detect disease in its early stages, when treatment is most effective and irreversible damage can be prevented or delayed. Using the new light source technology developed by the consortium in optical coherence tomography (OCT) and time-resolved spectroscopy make it possible to obtain relevant clinical data both for diagnosing disease early, when treatment is most effective, and to accurately track disease progression