



Experts in Femtosecond Laser Technology  
for Biomedical Applications

#### Principal Office

JenLab GmbH  
Schillerstr. 1  
D-07745 Jena  
Germany  
Phone: (+)49 - 36 41 47 05 01  
Fax: (+)49 - 36 41 47 05 43  
E-Mail: [info@jenlab.de](mailto:info@jenlab.de)  
Web: [www.jenlab.de](http://www.jenlab.de)

#### Contact Person

Mr. Jens W. MUELLER  
Director Sales  
Phone: (+)49 - 36 41 47 05 01  
Fax: (+)49 - 36 41 47 05 43  
E-Mail: [mueller@jenlab.de](mailto:mueller@jenlab.de)

JenLab GmbH founded in 1999 in Jena (Germany) employs now app. 15 employees, mainly operating in R&D. JenLab is member of different business clusters and networks.

The product range of JenLab includes a wide field of scientific equipment and supplementary products for optical Nanotechnologies based on femtosecond lasers, particularly for applications in biotechnology, cell biology and medicine. Furthermore special cell chambers for high-resolution microscopy are provided.

**DermaInspect**<sup>®</sup> is a novel in vivo multiphoton laser scanning system for non-invasive optical biopsies of human skin with sub-cellular spatial resolution. It is based on multiphoton-excitation of the autofluorescence on bio molecular level by femtosecond lasers in the near infrared. The device is designed for the examination of human skin and can be used for early detection of melanoma as well as for the in vivo detection of pharmaceutical and cosmetic components in skin. By the use of fluorescence lifetime imaging (FLIM) various fluorophores can be differentiated.

With **TauMap**<sup>®</sup> a system for spatial (nm-range) and temporal (ps-range) resolved fluorescence analysis and for the determination of fluorescence decay times in single living cells is available.

The system **femt-O-cut**<sup>®</sup> is suitable for nano-surgery and nano-processing with nJ and  $\mu$ J laser pulses. **femtOgene**<sup>®</sup> is the latest product of JenLab. It is suitable for optical gene transfer to successful delivery of foreign DNA into cells in vitro.

Potential application fields for JenLab-products can be found in micro- and nano-surgery, in refractive, tumor and neuronal surgery as well as in evolutionary biology.

Additional markets that can be developed with the know-how of JenLab are in the field of laser fabricating of nanostructures in polymers and semiconductors.