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canSERV

# Intravital microscopy (IVM) with fluorescent biosensors in mouse models of cancer

Provider: University of Oulu

## What service do we offer?

### **Intravital microscopy (IVM) with fluorescent biosensors in mouse models of cancer**

Intravital microscopy of mouse tumors labelled with fluorescent markers in combination with the label free second and third harmonic generation imaging in the brain and skin. We provide imaging windows implanted on the skull or in the skin (using skinfold chambers). Tumor-associated blood vessels can be observed using fluorescent tracers administered through an intravenous infusion.

**APPLY NOW!!**



### **Included in the service:**

*This is included in the service provision by default.*

Cranial and skin window preparations, multiphoton microscopy with a tunable 820nm-1300nm and fixed 1040nm dual output femtosecond laser and with 4-channel simultaneous detection, stereotaxic instruments, instrumentation for surgical operations, operative stereomicroscopes, an isoflurane anesthesia system.

### **Additional support:**

*This can be provided on demand if there is canSERV funding available, or on a fee-for-service or collaborative basis and will require further negotiations with the applicant.*

- Experimental animals,
- surgical operations,
- image analysis and
- quantification



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## Who provides this service?

### **Biocenter Oulu Light Microscopy Core Facility, University of Oulu (Finland)**



The [Biocenter Oulu Light Microscopy Core Facility](#) provides open access state-of-the-art image acquisition and analysis services for researchers, non-academic users and companies. We offer a fully equipped intravital microscopy laboratory that allows for on-site surgical procedures and imaging window implantations, along with advanced imaging modalities.

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[INFRAFRONTIER, the European Research Infrastructure for Modelling Human Diseases](#), is a non-profit organisation dedicated to advancing disease understanding and treatment through cutting-edge models. Operated by a [network of over 20 leading biomedical research institutes](#), it empowers research on human health and disease. Committed to excellence, INFRAFRONTIER adheres to rigorous scientific benchmarks and prioritises animal welfare. Through [collaboration with other infrastructures](#), it fosters global data sharing and contributes to tackling significant health challenges. INFRAFRONTIER serves as a platform for innovative technologies and knowledge exchange, leveraging the power of disease modelling to improve human health.

INFRAFRONTIER offers a host of cutting-edge in vivo services in [canSERV](#) like generation of precision cancer models, in-depth cancer phenotyping and more! These free-of-charge services are offered by INFRAFRONTIER partners that are world-class experts in disease modelling.