

The Finnish Centre for Alternative Methods, FICAM

Tuula Heinonen Director, FICAM University of Tampere

www.ficam.fi





Tampereen kaupunki



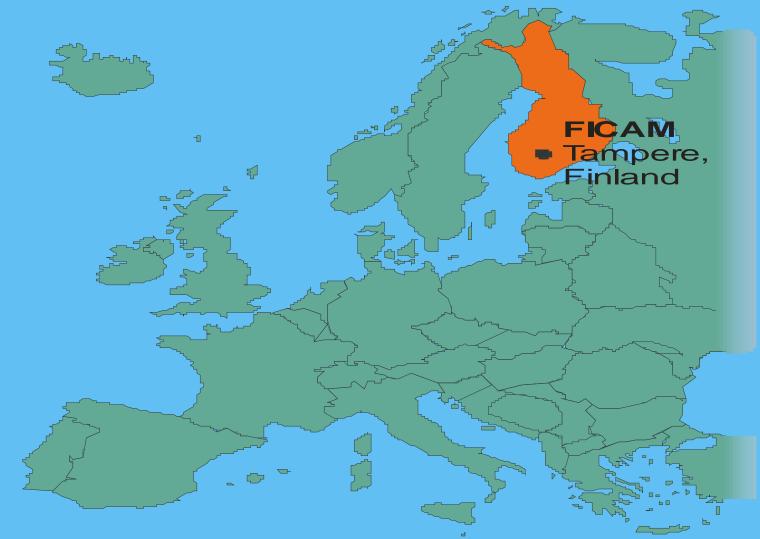


Mission

FICAM, the Finnish Centre for Alternative Methods, focuses on the development and validation of human cell based alternative methods. It promotes their use and awareness of them. FICAM applies modern multidisciplinary knowledge and functions according to Good Laboratory Practice (GLP).



Location





Basic information on FICAM

- Is located in the facilities of Medical School, University of Tampere
- Has key expertise: Cell and tissue research and technology are very active at Medical school and in the surrounding campus. Research and development on alternative methods over 10 years. Thus FICAM was a natural continuation.
- Has basic resources: 17 persons involved. QA and other resources needed are outsourced.
- Is acting according to the GLP
- Belongs to the strategic agenda of the university
- Basic funding from the Ministry of Education to secure critical resources. Additional project funding from various sources.



FICAM's basis lays on the multiscience network on cell and tissue technology in Tampere

- University of Tampere
 - Basic and applied science
 - Cell research
 - Pharmacology
- Tampere University Hospital
 - Tissue bank
 - Clinical medicine
 - Patient information
- Joint Replacement Hospital, COXA

- Tampere University of Technology
 - Basic science
 - Biomaterials
 - Automation
 - ICT
 - Signalling technology
- VTT Technical Research Centre of Finland
 - Applied science
 - Imaging analysis
 - Biosensors



Activities of FICAM: Expertise, information sharing and training

- Centre of expertise on alternative methods:
 - Information sharing through internet pages (www.ficam.fi)
 - Advanced training courses to students
 - Advanced training courses to industry and others outside the university
- Expertise on:
 - Validation of alternative methods
 - GLP (Good Laboratory Practice)



Activities of FICAM:

Development of validated alternative methods

- Human cell based 2D- and 3D-tissue models to supplement and/or replace animal experiments in safety and efficacy testing of e.g. industrial chemicals, pharmaceuticals, cosmetics
- Based on own innovations or co-operation with other research groups
- Activity areas:
 - Angiogenesis
 - Neurotoxicity
 - Hormonal responses
 - Barrier models
 - Basic cytotoxicity methods
 - Automatic image analysis



Activities of FICAM:

Reference laboratory for validation of alternative methods

- FICAM performs method validations under GLP and according to the relevant guidelines (e.g. OECD, 2005, No 34). Therefore, the method is expected to work similarly in any other similar laboratory
- FICAM may act as the (National) reference laboratory for method validations of ECVAM.
- FICAM may act as a validation centre for methods developed by other research groups. Finnish research groups shown interests



Models in place or in development for co-operation

- Angiogenesis (validated model)
- Endometrium model (POC obtained)
- BBB-model (POC obtained, further development ongoing)
- Neuronal cell models
- Cytotoxicity (MTT, WST, NRU)
- Kinetic imaging of cell growth



Congratulations to 20-years old ZEBET !!

