

Competence Centre TEDD

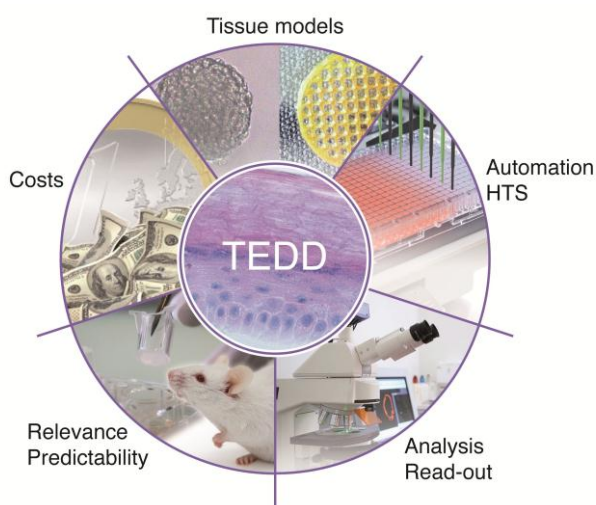
Tissue Engineering for Drug Development and Substance Testing

The world's first centre of its kind

The results of drug tests using conventional cell cultures have only limited applicability for transfer to humans. In the future, three-dimensional in vitro tissue systems will provide more reliable results. It will be possible to accelerate the cost intensive process of developing drugs and the number of animal experiments can be reduced.

In order to successfully develop these tissue systems, the cooperation of partners with complementary skills (academia and industry, in particular biotechnology, pharmaceutical and cosmetics companies) is required.

The TEDD competence centre is, therefore, pursuing the goal of pooling knowledge and technological information associated with in vitro cell and tissue cultures by promoting networking amongst partner organisations. In order to achieve this goal, TEDD organises workshops, symposia and other events for its members. The competence centre wishes to provide impetus to network projects, encourage innovative ideas and assist its members in accessing the market. It also aims to promote the development of technical quality standards and establish itself as a point of contact for public authorities. TEDD is the first centre of its kind.



Organisation

The Competence Centre is embedded in the Zurich University of Applied Sciences (ZHAW) and managed by Prof. Dr. Ursula Graf-Hausner, Institute of Chemistry and Biological Chemistry. In 2010 TEDD received initial funding from the Gebert Rűf Foundation.

TEDD is guided by a steering committee:

- Ursula Graf, Zurich University of Applied Sciences, Wädenswil
- Katharina Maniura, Empa, St. Gallen
- Jens Kelm, InSphero AG, Zurich
- Peter Oliver, Actelion, Allschwil
- Christoph Rindlisbacher CELLnTEC, Bern

An advisory board supports the steering committee strategically and consists of 5 members: Markus Ehrat, EK Bioscience; Dave W. Grainger, University of Utah; Uwe Marx, TU Berlin; Thomas Singer, Hoffmann-La Roche; Marcus Textor, ETH Zurich.

TEDD belongs to a technology platform of the national research consortium and association *biotechnet Switzerland*. biotechnet supports and amplifies the TEDD activities through the own network and the National Thematic Network NTN Swiss Biotech™.

TEDD Community (Members)

People from various fields are welcome in the TEDD network: experts from basic research, applied and clinical research, technology companies, the pharmaceutical and cosmetic industries, medical product manufacturers, funding associations and clusters. They benefit by making new contacts, can attend events at discounted prices and learn about ongoing projects of other members. The annual membership fee is 500 CHF

Members have the opportunity to actively contribute to the TEDD platform and take advantage of the activities available. Applications for start-up funding of CHF 10,000 for network projects are assessed and approved by the steering committee. Network projects that are developed on the TEDD platform are published on the website (in consultation with the persons and companies involved, taking confidentiality into account).

During the past two years, numerous network projects have been initiated and carried out. These projects will be presented at the annual meeting in October 2012.

TEDD activities during the last two years

- Kick-off Meeting, June 2011
- Bioprinting workshop with lectures and demonstrations, September 2011
- Several workshops during 2011/12 on 3D micro tissues and the "hanging-drop" method, delivered by InSphero AG
- International, three-day symposium in Zurich on "3D cell culture", in association with Dechema (240 participants), March 2012
- Networking events: company visits to Actelion (July 2012) and Givaudan (September 2012)
- Workshop on "in vitro skin", with lectures and demonstrations, October 2012
- Annual Meeting, October 2012
- Numerous network projects were initiated and completed.

Vision and Next Steps

In the coming years, the centre aims to establish itself internationally as an important point of contact for issues relating to three-dimensional cell and tissue systems. The aim is to steadily increase the number of members. Company visits, workshops and meetings will continue to promote active knowledge sharing and technology transfer.

In order for the members to fully profit from each other, a database will be created in which the members, their areas of expertise and those of their companies will be listed. It will also contain information on current and completed research projects.

Partnership demonstration projects that have potential for innovation are also planned. The first step will be to identify project ideas with the most potential. The projects will then be implemented under the leadership of TEDD.

Contact

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