

#### Hall 20, Booth B02

#### Project management

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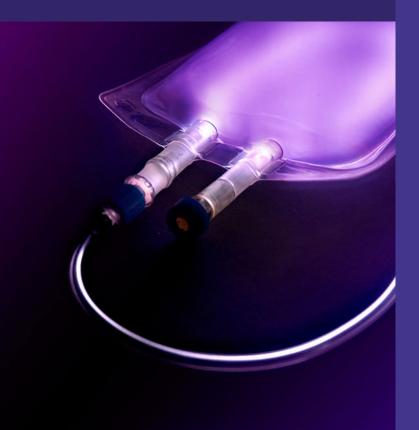
#### Press contact

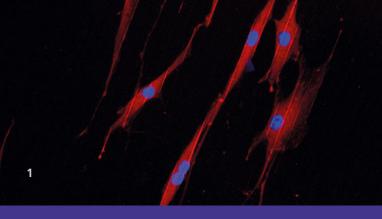
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#### Biotechnica, May 16–18, 2017, Hannover, Hall 20, Booth B02

# HUMAN HEALTH IS IMPORTANT TO US





# HUMAN HEALTH IS IMPORTANT TO US

Research and development for human health is one focus of the Fraunhofer-Gesellschaft, the largest research organization for applied science in Europe. We combine a broad range of disciplines to tackle challenges – from technology to facilitate drug development, disease research and treatment to ensuring water safety. Innovative developments in the life sciences are strongly driven by the interaction of different areas of expertise including biology, chemistry, biochemistry, biotechnology, medicine, pharmacology, ecology, production technology, lab technology, and surface engineering. Examples of specific projects include cell cultivation in a hanging droplet, bioreactors and 3D incubation systems for *in vitro* human tissue culture, production of scaffolds with a 3D printer, as well as water purification without adding chemicals. Interdisciplinary approaches allow us to find solutions for complex projects tailored to a broad spectrum of needs for the lab as well as applied research.

Come and see us in Hall 20, Booth B02

#### Scientific coordinator

Dr. Claus-Dieter Kroggel, Fraunhofer Group for Life Sciences Phone +49 511 5466-440 claus-dieter.kroggel@vls.fraunhofer.de



## THE FRAUNHOFER EXHIBITORS

Manufacturing Engineering

and Automation IPA

www.ipa.fraunhofer.de

Hall 20, Booth A45

## THE FRAUNHOFER EXHIBITS

#### Hall 20, Booth B02

**CELL CULTURE** 

#### Fraunhofer IST

Lab in a bag Cell cultivation in a hanging droplet

#### Fraunhofer IGB

14 3D tissue models as alternative to animal testing

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Customized bioreactors and incubator systems for 15 in vitro culture of human tissue

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#### **ENVIRONMENTAL PROTECTION**

#### Fraunhofer IST

10 Water purification without adding chemicals

#### MATERIALS SCIENCE AND SURFACE FUNCTIONALIZATION \_\_\_\_\_

#### Fraunhofer IST

- Plasma-Jet to coat 3D objects, e.g. scaffolds
- 3 Functionalized consumables
- Atmospheric pressure plasma processes 4
- Bioscaffolder: 3D printer, e.g. for bone replacement
- Tribological coatings 9

#### Fraunhofer IPT

13 Nano- and micro-structured surfaces: Predifferentiated stem cells in large quantities

#### **OTHER THEMES AND EXHIBITS**

#### Fraunhofer Group for Life Sciences

Applied research for companies in the life sciences 16 Overview

#### Fraunhofer Institute for Interfacial Engineering and **OTHER FRAUNHOFER** Biotechnology IGB INSTITUTIONS AT Translational Center **BIOTECHNICA /** Regenerative Therapies for LABVOLUTION Oncology and Musculoskeletal Diseases, Würzburg branch www.igb.fraunhofer.de Fraunhofer Institute for

Fraunhofer Institute for Surface Engineering and Thin Films IST www.ist.fraunhofer.de

Fraunhofer Institute for Production Technology IPT www.ipt.fraunhofer.de

Fraunhofer Group for Life Sciences www.lifesciences.fraunhofer.de

#### PHOTO ACKNOWLEDGEMENTS

Title: Fraunhofer IST

- 1. Fraunhofer IPT
- 2. Fraunhofer IGB
- 3. Fraunhofer IST
- 4. Fraunhofer IGB
- 5. Fraunhofer IST