

Michael Gelinsky

* 11. Oct. 1967, Tübingen (Germany)

Position: Professor and Head, Centre for Translational
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Education:

1988 - 1994: Study of Chemistry, University of Freiburg/Breisgau, Germany

1994: Diploma thesis (Inorganic Chemistry), University of Freiburg, Germany

1994 - 2001: Doctoral thesis (Bio-Inorganic Chemistry), University of Freiburg, Germany

Career:

1994 - 1998: Scientific co-worker, Institute of Inorganic and Analytical Chemistry, Albert-Ludwigs-University, Freiburg, Germany

1999 - 2002: Postdoc, Institute of Materials Science, TU Dresden, Germany

2002 - 2010: Head of the research group “Tissue Engineering and Biomineralisation” at the Institute of Materials Science/Max Bergmann Center of Biomaterials (Chair of Materials Science and Nanotechnology), TU Dresden, Germany

2010 - present: Full professor and head of the newly founded Centre for Translational Bone, Joint and Soft Tissue Research, Central Research Facility of Medical Faculty and University Hospital, TU Dresden, Germany

Motivation to become an ISBF board member:

Since 1999 my lab is working in the field of biomaterials and tissue engineering, initially at the Institute of Materials Science and since 2010 at the Medical Faculty of Dresden University of Technology (Germany) where I have been appointed as a full professor and head of the newly founded “Center for Translational Bone, Joint and Soft Tissue Research”. Also in 2010 we started with extrusion-based 3D printing in my lab, initially only for scaffold fabrication but later also with bioprinting/biofabrication. This field of research has developed strongly in my group since then and we already have published ca. 35 papers on these topics, including several in the leading journal *Biofabrication*. Beside our work on biomedical applications of additive manufacturing we have introduced 3D bioprinting to biotechnology: my group has been the first who printed successfully live microalgae (“green bioprinting”, DOI 10.1002/elsc.201400205) and now recently also plant cells (publication in *Biofabrication*, DOI 10.1088/1758-5090/aa8854).

Other significant achievements of my group were direct printing of hollow strands and 3D scaffolds thereof at room temperature and without utilizing any organic solvent or additional, sacrificial materials (DOI 10.1002/adhm.201200303), core/shell printing (DOI 10.1088/1758-5090/8/4/045001) and very recently nanoparticle-based online sensing of local oxygen concentration in 3D bioprinted constructs (manuscript in revision at *Advanced Functional Materials*).

Our work on 3D printing, bioprinting and biofabrication is quite well recognized and so I have been invited frequently as speaker and keynote speaker to conferences on these topics in the last years (3 x Boston, 1 x San Diego (U.S.), 3 x Dubai (UAE), ISBF Utrecht (NL) and Würzburg (Germany), Maastricht (NL), Cambridge, Manchester & London (UK), Basel (Switzerland), Ghent (Belgium), Pécs (Hungary), Hanover, 2 x Mainz & Munich (Germany) etc.).

On July 1st, 2017 we could start with a new “Young Researchers Group” on 3D printing/bioprinting of patient specific tissue constructs, consisting of 5 positions which are funded by the European Social Fund (ESF) for three years. This big project is further pushing our work in this field.

As a well networked member of the ISBF it would be an honor to help to further shape, develop and strengthen the Society which is why I want to run for the ISBF board.

More information about me, the lab and especially concerning our work on biofabrication can be found on www.biofabrikation.de (German spelling of *biofabrication*).