



May 23-25 • 2018  
Senftenberg •  
Germany



International Biotech  
Innovation Days –  
IBID 2018

THE GERMAN CAPITAL REGION  
excellence in life sciences & healthcare

## Organized by



## Supported by



## Exhibitors



## Welcome

The “International Biotechnology Innovation Days (IBID)”, previously known as “Innovation Forum Senftenberg” is celebrating its 10th anniversary in Mai 2018! The scope of the conference is to bring together specialists and experts in the fields of bioanalytics, biomedical and translational research, autoimmune diagnostics, digitalization, and engineering.

We are looking forward to lively discussions that will lead to new concepts and ideas, developments, co-operations and projects. This anniversary meeting will be full of research highlights, innovations and chances.

The IBID is organized by the Institute of Biotechnology of the Brandenburg University of Technology Cottbus-Senftenberg, the BioResponse e. V. together with the Cluster HealthCapital Berlin-Brandenburg. The format of the IBID encourages active participation, interaction and discussion of researchers, clinicians, healthcare providers, industry experts, innovators and students.

**More information:**  
<https://ibid-2018.b2match.io>

## International Biotech Innovation Days – IBID 2018

WEDNESDAY

MAY  
23

Data Science  
Workshops

New solutions  
for health care  
in rural areas:  
Gesundheits-  
campus  
Brandenburg

THURSDAY

MAY  
24

Basic Research  
& Translational  
Medicine

Bioinformatics

Social Evening:  
Sightseeing  
(Castle Senf-  
tenberg) and  
Conference  
Dinner

FRIDAY

MAY  
25

Translational  
Medicine –  
From Bench  
to Bedside

Autoimmune  
Diagnostics &  
Bioanalytics

Award  
ceremony:  
Best Posters  
and Short  
Lectures

Industrial Exhibition  
+  
Poster Exhibition

## Schedule – May 23<sup>rd</sup>

09:00 – 17:30

Data Science Workshops

### 1. Introduction to Data Science in R

This introductory workshop provides training in data mining with the R environment. Examples presented in the workshop will focus on applications in natural and life sciences.

### 2. Advanced Data Science in R – Machine Learning

This workshop is aimed at participants already familiar with the basics of R. After introducing participants to the basic concepts of supervised (classification/regression) and unsupervised (clustering) learning, they will learn how to efficiently and easily apply the most common techniques in R using the comprehensive mlr package.

15:00 – 18:00

New Solutions for Health Care in Rural Areas:  
Gesundheitscampus Brandenburg

**More information:**

<https://ibid-2018.b2match.io/home>

## Schedule – May 24<sup>th</sup>

08:30

Registration & Welcome Coffee

9:30

Grußworte

**Jörg Steinbach**, Präsident der BTU Cottbus-Senftenberg  
**Ulrike Gutheil**, Staatssekretärin im Ministerium für Wissenschaft, Forschung und Kultur des Landes Brandenburg  
**Andreas Fredrich**, Bürgermeister der Stadt Senftenberg  
**Jan-Heiner Küpper**, BTU Cottbus-Senftenberg, Institut für Biotechnologie, Leiter des Fachgebiets Molekulare Zellbiologie

10:40

Coffee, Industrial & Poster Exhibition

### Session I: Basic Research & Translational Medicine

Chair: Jan-Heiner Küpper, Brandenburg University of Technology Cottbus-Senftenberg, Senftenberg (GER)

11:10

Keynote: Multifunctional polymer particles for detoxification purposes

Karl Kratz, Institute of Biomaterial Science, HZG Teltow, Teltow (GER)

11:40

Role of oxygen sensors during physiological and pathological processes

Ben Wielockx, Technical University of Dresden, Dresden (GER)

12:00

Super-resolution imaging with nanorulers and nanobeads (DNA-Origami application)

Jürgen Schmied, GATTAquant GmbH, München (GER)

12:20

Fluorogenic real-time detection of loop-mediated isothermal amplification (LAMP) by novel mediator displacement (MD) probes – demonstrated for HIV-1 and HTLV-1

Lisa Becherer, Institut für Mikrosystemtechnik – IMTEK, Freiburg (GER)

12:40

### Short Lectures

Effect of storage on the formation of DNA double strand breaks in PBMCs

Madeleine Ruhe, Brandenburg University of Technology Cottbus-Senftenberg, Senftenberg (GER)

Evaluation of signal amplification strategies on microbeads.

Christoph Jurischka, Brandenburg University of Technology Cottbus-Senftenberg, Senftenberg (GER)

Metabolic activity testing underestimates acute cytotoxicity of cyclophosphamide as revealed by cytochrome P450 overexpressing human hepatoma cell clones

Susanne Steinbrecht, Brandenburg University of Technology Cottbus-Senftenberg, Senftenberg (GER)

Physiologically relevant cell lines with unlimited expansion potential

Tom Wahlicht, InSCREENeX GmbH, Braunschweig (GER)

13:20

Lunch, Industrial & Poster Exhibition

### Session II: Bioinformatics

Chair: Stefan Rödiger, Brandenburg University of Technology Cottbus-Senftenberg, Senftenberg (GER)

14:40

Keynote: Epigenomic Networks

Martin Vingron, Max Planck Institute for Molecular Genetics, Berlin (GER)

15:10

Data Science in gene expression analysis – how to unveil molecular causes of male infertility

Andrej-Nikolai Spiess, University Medical Center Hamburg-Eppendorf UKE, Hamburg (GER)

15:30

Computational analyses in cancer immunology

Hubert Hackl, Medical University of Innsbruck, Innsbruck (AUT)

15:50

Distributed genomic data processing and analysis for personalised medicine

Michal Okoniewski, ETH Zürich, Zürich (CHE)

16:10

tba

Aleksandra Gruca, Silesian University of Technology, Gliwice (POL)

16:30

Coffee, Industrial & Poster Exhibition

17:00

Innovative Hochschule – The emergence of Life Science at BTU

Franziska König, Brandenburg University of Technology Cottbus-Senftenberg & Innovative Hochschule – Innovation Hub 13, Senftenberg (GER)

17:10

StartUp Pitches

Chair: Bundesverband Deutsche Startups e.V.

18:00

Guided Tour: Castle Senftenberg

19:00

Conference Dinner

## Schedule – May 25<sup>th</sup>

8:00

Registration & Welcome Coffee, Industrial & Poster Exhibition

### Session III: Translational Medicine – From Bench to Bedside

Chair: Sarah Kammerer, BTU Cottbus-Senftenberg

9:00

Key Note: Molecular biomarkers for cancer research using liquid biopsies

Amin El-Heliebi, Medical University of Graz, Graz (AUT)

9:30

Microsystems for the in vitro processing and analysis of cells  
Claus Duschl, Fraunhofer IZI-BB, Potsdam (GER)

9:50

Preventive health care by microbiome analyses, machine learning and the power of community

Paul Hammer, BIOMES NGS GmbH, Wildau (GER)

10:10

Coffee, Industrial & Poster Exhibition

10:50

Quantification of DNA double-strand breaks in blood by an automated  $\gamma$ -H2AX assay

Markus Deckert, Brandenburg Medical School Theodor Fontane, Brandenburg an der Havel (GER)

11:10

Welcome to the RNA Revolution: RNAscope in situ hybridization, a specific and sensitive method to detect RNA biomarkers in cells and tissues with morphological context  
Jacqueline Ay, ACD Bio, Wiesbaden (GER)

11:25

System integration and point of care devices for molecular diagnostics

Johannes Peham, AIT Austrian Institute of Technology, Vienna (AUT)

11:40

#### Short Lectures

Immobilized antigens on functionalized microbeads or biosensor surfaces – who performs better?

Janine-Melanie Potreck, Technische Universität München, München (GER)

Microsensors for real-time monitoring of biomolecular interactions: Low-Q Whispering Gallery Modes (WGM)

Cagri Üzümlü, Surfay Nanotec GmbH, Berlin (GER)

Development of a multilayered microbead based assay for a size selective detection with increased multiplexicity

Anna Herrmann, Freie Universität Berlin, Berlin (GER)

12:20

Lunch, Industrial & Poster Exhibition

#### Session IV: Autoimmune Diagnostics & Bioanalytics

Chair: Dirk Roggenbuck, Brandenburg University of Technology Cottbus-Senftenberg, Senftenberg and MEDIPAN GmbH, Dahlewitz (GER)

13:30

Key Note: Emerging technologies for Point-of-care diagnostics

Peter Lippa, Technische Universität München, München (GER)

14:00

Bioresponsive 24/7 Diagnostics: Deploying the tongue as 24/7 available detector

Tessa Lühmann, University of Würzburg, Würzburg (GER)

14:20

Autoimmune diagnostics

Christian Regenbrecht, cpo – cellular phenomics & oncology GmbH, Berlin (GER)

14:40

Coffee, Industrial & Poster Exhibition

15:00

Syndecan-4 – a new diagnostic marker for inflammatory bowel disease?

Mareike Fröhling, VIB-UGent Center for Inflammation Research, Gent (BEL)

15:20

Award Ceremony: Best Poster & Best Short Lecture

Chair: Peter Schierack, BioResponse e.V.

15:40

Closing Remarks

Christine Mißler, Berlin Partner for Business and Technology, Berlin + Potsdam (GER)

16:00

End

## Contact

Berlin Partner für Wirtschaft und Technologie GmbH  
Christine Mißler

Tel. +49 331 979 22 13

Email: [christine.missler@berlin-partner.de](mailto:christine.missler@berlin-partner.de)

BTU Cottbus-Senftenberg

Stefan Rödiger

Tel. +49 3573 859 36

Email: [stefan.roediger@b-tu.de](mailto:stefan.roediger@b-tu.de)

## Venue

BTU Cottbus-Senftenberg

Campus Senftenberg • Medienzentrum

Großenhainer Straße 57 • 01968 Senftenberg • Germany

## Further Information

<https://ibid-2018.b2match.io/>