

# Design Thinking – Innovation, Law, Politics & Biotechnology '20

## Where:

Hasso Plattner Institute (HPI),  
Prof.-Dr.-Helmert-Str. 2-3,  
14482 Potsdam,  
HPI Main Building (Hauptgebäude, Haus H),  
3rd floor, D-Space

## When?

**Dec 3, 12:30 - 5 pm**

**Dec 4: 9 am - 4:15 pm**

## Thursday, Dec 3

**12-12:30 Arrival, Coffee & Tea**

**12:30-14:00 Modellierung von Innovationsräumen und -prozessen zur Europäischen Biotechnologie**

Detlef Bartsch, Julia von Thienen & Jens Kahrman

Introduction to a project by the Bundesamt für Verbraucherschutz und Lebensmittelsicherheit (BVL) and the Hasso Plattner Institute at Potsdam University (HPI) on the regulation of genome editing techniques and its consequences for innovation developments

Presentation in German, discussion bilingual. Subsequent program in English

**14:00-14:15 Coffee & Tea**

**14:15 – 15:20 Biotechnology & Law – Research Hotspots**

Kai Purnhagen: A novel research hub emerging at the University of Bayreuth; emerging work clusters

Alexandra Molitorisová: Outline of a PhD project

Thorben Sprink (via Zoom): Works at the Julius Kühn-Institut (JKI), Federal Research Centre for Cultivated Plants, Genome Editing Lab

Luana Ladu: Works at the Technical University of Berlin; transformation-oriented innovation policy in the field of bioeconomy; standards and regulations for the bio-based industry, sustainability assessment schemes (e.g. EU Ecolabel) and foresight methodologies

Sebastian Kistler (via Zoom): Works at the Ludwig-Maximilians-Universität München; Katholisch-Theologische Fakultät; general concerns and BMBF project; who is involved

Matthias Braun (via Zoom): Works at the Friedrich-Alexander-Universität Erlangen-Nürnberg, Systematic Theology II: Ethics; political ethics; ethics of emerging biotechnologies; ethics of artificial intelligence

Marvin Bartels: Reflections on the Humboldt-Universität zu Berlin as a research hotspot for “biotechnology & law”; personal work: relationships and interactions between ethics and patent law against the background of innovative biotechnologies

Charlotte Vollenberg (via Zoom): Reflections on the Humboldt-Universität zu Berlin as a research hotspot for “biotechnology & law”; personal work: plant variety protection - a “muddle of concepts” to design-think about?

### **15:20 – 16:00 Community Building – Personal Introductions**

Bärbel Jansen

Martin Spaja

Joaquin Santuber

Reem Abou Refaie

Babajide Owoyele

Kim-Pascal Borchart

Lina Krawietz

### **16:00-16:15 Coffee, Tea & Cake**

### **16:15-17:00 Inspiration Talks**

Julia von Thienen and Constantin Hartmann (5 min): The definition of creativity and why law-making is by definition a creative act; the design of law

Lina Krawietz & Joaquin Santuber (20 min): Law-Making as a Creative Process / Design Thinking Law; This is Legal Design, founded by HPI D-School alumni, concerns and examples

Jan Schmiedgen (via Zoom, 20 min): A framework to model blocks and facilitating factors for innovation in organizations incl. the public sector; a case study on digitization and online-offers of the UK government that facilitate innovation in the UK

## **FRIDAY**

**8:30-9:00 Arrival, Coffee & Tea, Breakfast: Vegetarian Wraps**

**9:00-9:15 Welcoming**

Thorben Sprink (via Zoom): Market-oriented applications of CRISPR-Cas9; a comparative overview of developments in different countries

## **9:15 – 10:15 Towards a Better Alignment of Encouragement & Desirability – the Regulation of CRISPR and Data Technology**

Detlef Bartsch & Julia von Thienen: Amended design thinking frameworks to better elucidate the role of laws – working towards a good alignment of encouragement & desirability

Detlef Bartsch & Jens Kahrmann: Why and how current regulations in the EU do not encourage what is desirable in genetic engineering

Kai Purnhagen & Alexandra Molitorisová: Perspectives on the regulation of CRISPR technology

Luana Ladu: Governance of genome editing techniques for the bio-based economy

Herbert Zech (video): Perspectives on the regulation of CRISPR and data technology

Christoph Meinel (video, 10-15 min): Why and how current regulations in the EU do not encourage what is desirable and drive the continent towards becoming a “digital colony” of the US and China

## **10:15 – 10:30 Coffee & Tea**

## **10:30 – 12:15 Ethics, Risk-Benefit Assessments of Inventions, and How to Use this for Regulatory Purposes**

Marvin Bartels: Ethics & patent law with special emphasis on innovative biotechnologies - key insights from a PhD study

Alexandra Molitorisová: “Benefits” as a socio-legal concept in regulatory decision-making with special emphasis on CRISPR technology; how to evaluate benefits in interdisciplinary ways; how to use risk-benefit assessments to inform laws & regulation

Sebastian Kistler (via Zoom): Innovation and risk assessment/precaution not as opposites, but as two complementarily related concepts. Special focus: Precaution and innovation in the field of bioeconomy; developing an ethical step model for the evaluation of genome editing in agriculture

Matthias Braun (via Zoom): Ethics in and by design, case studies from the fields of biotechnology and IT

Julia von Thienen: Ethics and human need assessments as fundamentals for the development of worthwhile innovation; historic overview (John Arnold, Robert McKim, Abraham Maslow); need-based design theory; practical introduction: how to work with need hierarchies; review of a novel need framework including needs to preserve the environment

Kim-Pascal Borchart: Exploring ethical perspectives on digital engineering developments; concerns and interesting cases, such as blockchain

Kim-Pascal & Julia von Thienen: Workshop with prototype templates; everybody trying out need-based ethic assessments regarding a team-chosen product; how to use this approach in creative processes, political and regulatory contexts?

## **12:15 – 13:15 Lunch: Vegetable chilli with yogurt, baguette & salad**

## **13:15 – 14:15 Applications of Design Thinking in the Public Sector**

Bärbel Jansen & Martin Spaja: Ideas for a use of design thinking as a means to re-organize crisis management at the BVL, Unit 122

Christian Gröber: Introduction to personal background and previous research; current project with Constantin Hartmann

Babajide Owoyele: Leveraging digital trace data to explore values-based innovation systems and the emergent role of the fourth helix (culture, values and digital technology) in mediating transformative innovation. Comments on the role of (digital) engineers herein.

Reem Abou Refaie: A research agenda “design thinking as an approach to foster public sector innovation” and preliminary reflections; why do public sector organizations adopt design thinking, how do they do it, what challenges do they encounter (e.g., laws, regulations), and how do they respond to these challenges; what is the impact of design thinking in the public sector?

#### **14:15 – 14:30 Coffee & Tea**

#### **14:30 – 15:30 Digital Transformation in Legal & Public Contexts**

Joaquin Santuber: Differences between regular vs. online courts, including risks and benefits of delivering justice online; a large case study in Chile; comments on the adoption of AI and machine learning in the context of law and justice

Alexandra Molitorisová: Ideas for the role of artificial intelligence to map out complex legal landscapes and facilitate decision-making

Reem Abou Refaie: The digitalization of public service delivery, facilitating or hindering factors and impacts – a case study (in-progress) on Rwanda

Bärbel Jansen & Martin Spaja: How novel digital work solutions (might) change crisis management at the BVL, Unit 122

#### **15:30 – 16:00 I-Wish-I-Like with Coffee & Tea**