

Online Conference (18 September 2020, 9:00 am – 5:10 pm)

## **Bridging the Gap Between New Technologies, Health Research and the Protection of Personal Data: GDPR Impact**

The GDPR impact conference was held within the framework of TVB-Cloud, an EU-funded research project that aims to develop a cloud-based platform for biomedical research and clinical decision-making that helps to improve early patient-specific diagnosis and treatment of neurodegenerative diseases.

The conference addressed debates surrounding the regulatory framework and use of new technologies in the healthcare sector, in particular, in light of privacy and data protection. The conference also addressed the application of these topics into transitional AI research projects, which were taken as practical cases dealing with these current debated issues. A case study which depicts these interdisciplinary aspects of new technologies, health research and data protection is the TVB-Cloud EU-funded Project.

### **Welcome remarks & Opening statement (0:00-10:22)**

Nikolaus Forgo/Michael Cepic

### **Session 1: Privacy, data protection and ethics: The rise of new technologies in the healthcare sector**

Introductory Moderation (Michael Cepic) (10:23- 13:03)

Dipak Kalra (i~HD) (13:05-29:13)	Catalysing innovations through health data: is GDPR a blunt enough instrument?
Sabine Fehringer & Stefan Panic (DLA Piper) (29:47-51:35)	AI Doctor – use of artificial intelligence in medical diagnosis
Jan Bjaalie (EBRAINS – HBP) (51:45-1:03:45)	Sharing and publishing human brain data through the EBRAINS research infrastructure
Tanja Sinozic-Martinez (ITA) (1:04:48-1:17:57)	Technology governance of the electronic patient records system (ELGA) in Austria: secret and exclusive, or transparent and inclusive?

Discussion Session 1: 1:18:10-1:41:36

### **Session 2 (11:05 – 12:35): GDPR and Artificial Intelligence related challenges in healthcare research projects**

Introductory Moderation (Emily Johnson) (1:41:42-1:44:00)

Heidi Bentzen (University of Oslo) (1:44:00-1:58:37)	Bias and discrimination, misuse, and ethics vs law as a way to regulate AI
Gauthier Chassang (INSERM) (1:58:59-2:24:10)	Legal challenges of AI regarding the respect of transparency obligations imposed by GDPR in

	the use of AI devices in health, including in research.
Katerina Polychronopoulos (UNIVIE) (2:25:00-2:42:10)	Should governments apply different regulatory standards to the use of AI in diagnosis and research?
Edgar Weippl (UNIVIE) (2:42:34-3:01:25)	GDPR and Artificial Intelligence: Challenges in healthcare research projects

Discussion Session 2: 3:01:43-3:21:05

### **Session 3 (13:35 – 15:05): Data security and Artificial Intelligence in the healthcare sector**

Introductory Moderation (Emily Johnson) (3:21:11-3:23:59)

Cecilia Magnusson Sjöberg (U. Stockholm) (3:24:01-3:43:37)	A structured approach to AI-based health research - seldom asked questions
Dara Hallinan (FIZ Karlsruhe) (3:44:25-3:58:53)	Clarifying the relationship between informational self-determination and data security.
Jan Schallaböck (iRights Law) (3:59:17-4:10:42)	Corona App vs. Electronic Medical Files in Germany - a tale of two different approaches
Fruzsina Molnár-Gábor (U. Heidelberg) (4:11:16-4:22:33)	Concretising provisions for data processing and security for ML-based medical applications

Discussion Session 3: 4:22:55-4:42:50

### **Session 4 (15:25 – 16:55): Artificial Intelligence and the applied law: TVB– Cloud project on prevention, detection and treatment of NDDs – Technical, legal and ethical challenges**

Introductory Moderation (Michael Cepic) (4:43:02- 4:46:48)

Petra Ritter (CHARITÉ) (4:46:50-5:03:09)	The Virtual Brain Cloud: Building a reference cloud architecture for integrating health data
Nathan Lea (i~HD) (5:03:25-5:24:55)	'I'd like a second opinion...' How do we regulate digital doctors?
André Gemünd (Fraunhofer SCAI) (5:25:12-5:41:12)	TVB-Cloud secure infrastructure: from theory to practice
Angela Bradshaw (Alzheimer Europe) (5:41:40-6:03:43)	TVB-Cloud: ethics and the patient perspective

Discussion Session 4: 6:03:50-6:15:29)

### **Closing remarks & Farewell (6:16:00-6:19:36)**

Nikolaus Forgo/Emily Johnson