# Towards Genomic Newborn Screening in Germany

Risks, Opportunities, Challenges | March 18/19, 2024 | Heidelberg University

## Day 1 (Monday March 18, 2024)

08:00 - 08:30	Arrival & Coffee
08:30 - 08:40	Welcome & Introduction Eva C. Winkler (Heidelberg University)
08:40 - 09:40	Sequencing healthy newborns is not yet ready for prime-time Lainie Friedman Ross (University of Rochester)
09:40 - 10:40	Strategies to reduce uncertainty (and harm) caused by recent and future NBS programmes James Bonham (Sheffield Children's NHS Foundation Trust)
10:40 - 11:10	Coffee
11:10 - 11:40	Revising the Wilson-Jungner criteria for (genomic) newborn screening: Lessons from the German NBS program Elena Schnabel (Heidelberg University)
11:40 - 12:10	Genome Sequencing Pilot Study: Evaluating feasibility and scalability for genome-wide newborn screening Heiko Brennenstuhl (Heidelberg University)
12:10 - 13:30	Lunch
13:30 - 14:30	Genomic newborn screening: Which findings from 20,000 genes should we report? – Some strategic considerations Christian Schaaf, Nicola Dikow (Heidelberg University)
14:30 - 15:30	How longitudinal observational studies can guide a screening strategy for rare diseases: Implications of genomic screening Stefan Kölker, Ulrike Mütze (Heidelberg University)
15:30 – 16:00	Coffee
16:00 - 17:00	The BabySeq Project: A randomized trial of genomic sequencing in newborns Ingrid Holm (Harvard Medical School, Boston Children's Hospital)
17:30 – 19:00	Keynote Lecture at Heidelberg Academy of Sciences & Humanities
	Newborn Screening, diagnosis, and precision medicine by genome sequencing and Al Stephen Kingsmore (Rady Children's Hospital)
19:00	Dinner at Kulturbrauerei (Speakers only)

## Day 2 (Tuesday March 19, 2024)

08:00 - 08:30	Arrival & Coffee	
08:30 - 08:40	Welcome & Introduction Eva C. Winkler (Heidelberg University)	
08:40 – 09:40	Implementing genomic newborn screening: Challenges in the German legal context Ralf Müller-Terpitz, Hannah Straub (Mannheim University)	
09:40 - 10:40	Genomic newborn screening: Consent and privacy related concerns Mahsa Shabani (University of Amsterdam)	
10:40 – 11:00	Coffee	
11:00 - 11:30	Genomic newborn screening for adult actionable conditions – Why not?! Karla Alex, Eva C. Winkler (Heidelberg University)	
11:30 – 12:00	Medicalization risks in genomic newborn screening Sascha Settegast (University of Halle-Wittenberg) Eva C. Winkler (Heidelberg University)	
12:00 - 13:00	Lunch	
13:00 - 14:00	The impact of genomic newborn screening on the family Stacey Pereira (Baylor College of Medicine)	
14:00 – 15:00	<b>Psychosocial determinants of familial decision-making in genomic newborn screening</b> Beate Ditzen, Julia Mahal, Elena Doll, Carlotta Mayer (Heidelberg University)	
15:00 – 15:30	Coffee	
15:30 – 16:30	Genomic newborn screening: Principles and strategies for parental counselling Maja Hempel, Stefan Bär, Sebastian Sailer (Heidelberg University)	
16:30 – 18:00	Roundtable discussion with patient representatives	
18:00	Dinner	
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Organization Contact	Dr. Sascha Settegast, Dr. Heiko Brennenstuhl sascha.settegast@phil.uni-halle.de	
Conference Venues	International Academic Forum Heidelberg (IWH), <i>Hauptstraße</i> 242 Heidelberg Academy of Sciences & Humanities, <i>Karlstraße</i> 4	
Dinner March 18	Restaurant "Kulturbrauerei" at Leyergasse 6	
Acknowledgments	We would like to thank the <i>Fritz Thyssen Foundation</i> for its generous finan- cial support and the <i>International Academic Forum Heidelberg</i> (IWH) for gen- erously allowing us the use of its premises.	

## **List of Speakers**

#### Karla Alex

Section of Translational Medical Ethics, National Center for Tumor Diseases, Heidelberg University

**PD Dr. rer. pol. Stefan Bär** Max Weber Institute of Sociology, Heidelberg University.

**Prof. James Bonham, PhD, MBE** Sheffield Children's NHS Foundation Trust. President of *International Society of Neonatal Screening*.

**Dr. med. Heiko Brennenstuhl, MBA** Institute of Human Genetics, Heidelberg University.

#### **Dr. med. Nicola Dikow** Institute of Human Genetics, Heidelberg University.

**Prof. Dr. phil. Beate Ditzen** Director of the Institute of Medical Psychology, Heidelberg University.

**Elena Sophia Doll, M.Sc. Psych.** Institute of Medical Psychology, Heidelberg University.

**Tobias Hagedorn** (patient representative) DIG PKU e.V.

**Prof. Dr. med. Maja Hempel** Director of Genetic Clinic, Heidelberg University Hospital.

#### Prof. Ingrid Holm, MD, MPH

Professor of Pediatrics at Harvard Medical School; Harvard Medical School Center for Bioethics; Division of Genetics and Genomics, Boston Children's Hospital.

**Prof. Stephen Kingsmore, MD, DSc** President/CEO Rady Children's Institute for Genomic Medicine, Rady Children's Hospital San Diego.

#### Prof. Dr. med. Stefan Kölker

Head of the Section for Neuropediatrics and Metabolic Medicine, Center for Pediatrics and Adolescent Medicine, Heidelberg University Hospital.

**Dr. phil. Julia Mahal** Institute of Medical Psychology, Heidelberg University.

Carlotta Mayer, M.Sc. Psych.

Institute of Medical Psychology, Heidelberg University.

#### Prof. Dr. iur. Ralf Müller-Terpitz

Chair of Public Law, Law of Economic Regulation and Media. Director of the Institute for German, European and International Medical Law, Health Law and Bioethics (IMGB), Mannheim University.

#### Dr. med. Christine Mundlos (patient representative)

ACHSE e.V.

#### PD Dr. med. Ulrike Mütze

Section for Neuropediatrics and Metabolic Medicine, Center for Pediatrics and Adolescent Medicine, Heidelberg University Hospital.

#### Prof. Stacey Pereira, PhD

Center for Medical Ethics and Health Policy, Baylor College of Medicine.

#### Prof. Lainie Friedman Ross, MD, PhD

Dean's Professor and Chair, Department of Health Humanities & Bioethics; Director, Paul M. Schuyve MD Center for Bioethics; University of Rochester School of Medicine.

#### Dr. med. Sebastian Sailer

Institute of Human Genetics, Genetic Clinic, Heidelberg University.

#### Prof. Dr. med. Christian Schaaf

Director of the Institute of Human Genetics, Heidelberg University.

#### Dr. med. Elena Schnabel

Section for Neuropediatrics and Metabolic Medicine, Center for Pediatrics and Adolescent Medicine, Heidelberg University Hospital.

#### Dr. phil. Sascha Settegast

Department of Philosophy, Martin-Luther-University of Halle-Wittenberg.

#### Prof. Mahsa Shabani, PhD

Associate Professor in Health Law and Digital Citizenship, Law Centre for Health and Life, University of Amsterdam.

#### **Claudia Sproedt** (patient representative) Cystinose e.V.

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# Hannah Straub, Mâitre en Droit

Department of Law, Mannheim University.

#### Prof. Dr. med. Dr. phil. Eva C. Winkler

Head of the Section of Translational Medical Ethics, National Center for Tumor Diseases, Heidelberg University.