



Final programme



Explore the ethical implications of Human Genome Editing, including the scientific and medical possibilities, various ethical approaches and options for effective governance and regulation.

Overview of event: The last decade has seen a dramatic increase in the pace of scientific development of genome editing technologies, particularly highlighted by the advances enabled by CRISPR-Cas9. One area of immense potential is the use of genome editing technologies in humans. Alongside the potential benefits, there are a number of ethical and legal issues that arise, posing challenges for the development of robust governance of this technology. This Blended Intensive Program will explore the ethical implications of this emerging technology, noting the scientific and medical possibilities, and the various ethical and legal approaches and implications as well as the options for its effective governance and regulation.



This Blended Intensive Program will combine lectures (virtual 12th June – 10th July 2023; in-person 27th-31st July 2023) by experts in the field, alongside extensive interactive deliberative workshops, a one-day symposium, as well as activities around Tübingen's historic Old Town (including a visit to the [German Castle where DNA was first discovered](#)).

Location of the physical event:

Konferenzzentrum, Casino building,
Otfried-Müller-Straße 6, 72076 Tübingen

For location on map: insert the following number
in the Google maps:

48.53069187740794, 9.03981413424122

The local bus stop is **Uni-Kliniken Berg**

- Regular town buses (5, 13, 18, 19...)
- 9-10 min journey from the middle of town.
- For more information on town bus routes:

<https://www.swtue.de/oePNV/fahrgastinformationen/fahrgast-cockpit.html>





Virtual sessions (all times CET): all zoom based

To join any Virtual Zoom Session: Virtual sessions have concluded

NB: All students will be expected to attend all virtual sessions, except in cases of clashes with academic commitments, illness, etc. Reasonable attendance must be maintained for eligibility for Erasmus+ funding. If there are clashes, certified illness, or other reasonable reasons, you must contact oliver.feeney@uni-tuebingen.de at the earliest opportunity.

Virtual session 1

Thursday 15th June 4pm – 6pm

Oliver Feeney

Welcome to the BIP – overview and introductions

Virtual session 2

Thursday 22nd June 4pm – 6pm

José M Carrascosa

- **Current development of somatic cell genome editing application. Ethical issues**

Lecture: Today's session will be dedicated to analysing the advances reached during the last years in developing methods for somatic cell genome editing and their current applications in several cases. After making emphasis on the differences between somatic and germline cells, we will introduce the main challenges of this technology, regarding both, edition tools and delivery systems. The pros and cons of the different methods will be explored from the perspective of efficacy, safety, etc. Finally, some applications of these methods will be presented as well as an overview of the studies that are already underway as clinical trials. The last part of the session will focus on the ethical issues associated with genome editing of somatic cells.

Class engagement: TBD

Reading recommendations:

Joy Y. Wang and Jennifer Doudna, CRISPR technology: A decade of genome editing is only the beginning. *Science* 379, eadd8643 (2023)

https://www.science.org/doi/10.1126/science.add8643?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%20pubmed

Jennifer Khirallah, Maximilan Eimbinder, Yamin Li and Qiaobing Xu, Clinical progress in genome-editing technology and in vivo delivery techniques. *Trends in Genetics* 39: 208-216 (2023)

- **Gene therapy for Sickle Cell Disease (SCD) in Spain: Patient's perspective**

Spain's Sickle Cell Disease Association (Lecturer: Alonso Soto)

Lecture: As the number of sickle cell patients grows in Spain so is the interest in new therapies to provide relief or cure for the illness. Patients and relatives are trying to find more information about gene therapy treatment, its success rate, availability and costs. We will discuss some of the concerns from patients and relatives with Alonso Soto, a member of Spain's Sickle Cell Disease Association and father of two girls with SCD.



- **From Bench to Bedside - Translational research ethics (I): Intro - historical & philosophical perspectives.**

Lecture: In my lecture, I will give an overview of existing and widely used principles in research ethics, including scientific validity, independent review, scientific and social value, favourable risk-benefit ratio, fair subject selection, informed consent, and respect for research participants, as well as provide historical context for the development and evolution of research ethics principles. Following an introduction to research ethics in general, I will then highlight some of the follow-up questions that arise when these principles are applied to the scenario of germline genome editing as a clinical application, and the unique effects that the technique's heritability and intergenerationality bring forth in a research ethics context, showing how a rhetoric of "sufficient safety", on its own, is too short-sighted to guide an ethical translational "responsible pathway" from bench to bedside.

Class engagement: Participants will be broken up into small groups and given discussion questions (content tbd) concerning aspects of translational research in (Germline) Genome Editing. will be assigned approx. ten minutes to work through questions and five minutes to present their results to the other groups. Remaining time will be spent on whole group discussion and open questions.

Reading recommendations

Emanuel, E.J., Wendler, D. and Grady, C., 2000. What makes clinical research ethical?. *Jama*, 283(20), pp.2701-2711. <https://jamanetwork.com/journals/jama/fullarticle/192740>

Evitt, N.H., Mascharak, S. and Altman, R.B., 2015. Human germline CRISPR-Cas modification: toward a regulatory framework. *The American Journal of Bioethics*, 15(12), pp.25-29. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4699477/>

...Continued in session 5 below

- **DNA versus RNA Therapies**

Lecture: This session will give a history of RNA therapies and lay down definitions in this field. We will get introduced to antisense oligonucleotides, siRNAs, miRNA-therapeutics, RNA editing technologies. We will further learn about how to use RNAs to edit the genome (RNA-based CRISPR) or to silence entire chromosomes (XIST). We will ponder about how the duration of effect differentiates RNA and gene therapies and how improving technology is closing this gap. We will also discuss class specific toxicities, the nature of a platform technologies and its advantages as well as disadvantages in drug development, including trial design, and a possible future of the regulatory landscape. We will briefly mention the N of 1 initiative in the oligonucleotide field.

Class engagement: Answering questions, clearing up terms. Voting.

...Continued on Thursday 27th July in person



Virtual session 5

Thursday 29th June – 7pm – 8pm

Katharina Trettenbach

- **From Bench to Bedside - Translational research ethics (II): Research Ethics & Genome Editing.**

Lecture: [continued from Tuesday 27th session] In my lecture, I will give an overview of existing and widely used principles in research ethics, including scientific validity, independent review, scientific and social value, favourable risk-benefit ratio, fair subject selection, informed consent, and respect for research participants, as well as provide historical context for the development and evolution of research ethics principles.

Following an introduction to research ethics in general, I will then highlight some of the follow-up questions that arise when these principles are applied to the scenario of germline genome editing as a clinical application, and the unique effects that the technique's heritability and intergenerationality bring forth in a research ethics context, showing how a rhetoric of "sufficient safety", on its own, is too short-sighted to guide an ethical translational "responsible pathway" from bench to bedside.

Class engagement: Participants will be broken up into small groups and given discussion questions (content tbd) concerning aspects of translational research in (Germline) Genome Editing. will be assigned approx. ten minutes to work through questions and five minutes to present their results to the other groups. Remaining time will be spent on whole group discussion and open questions.

Virtual session 6

Wednesday 5th July – 4pm – 6pm

Aurélie Mahalatchimy

- **The fragmented regulatory landscape on human genome editing.**

Lecture: This session is dedicated to the awareness of the complexity of the regulatory landscape on human genome editing. First, the numerous legal orders/systems involved on the topic will be identified. Second, the various legal values of their production will be clarified. Moreover, the role of law, regulation, norm, standard and policy will be discussed as well as their potential overlapping, complementarity and conflict. This session does not aim to analyse the content of the law applicable to human genome editing but to understand how much the law is context-dependent and the regulatory landscape is evolving through fragmentation and defragmentation processes in the field of human genome editing.

Class engagement: Starting from the students' individual knowledge of the regulatory landscape on human genome editing, the lecture will be divided into various times based both on short and targeted guided research on the Internet to be made by sub-groups of students and on full class discussion for the key take-home messages to be highlighted and explained.



Virtual session 7:

Friday 7th July – 4pm – 6pm

Heidi Howard

- **Gender aspects of genome editing**

Lecture: This lecture will address ethical and social issues of genome editing specifically relating to gendered aspects in research of genome editing (e.g. regarding risks to gamete donors). We will discuss the role of women (and persons with female reproductive organs) in current research practices as well as the potential implications for these groups if research is scaled up in order to refine germ line genome editing for future clinical use. Issues related to communication, consent and policy making and gender will also be raised.

Class engagement: The session will include smaller group discussions (via break out rooms) to address specific questions and cases.

Suggested reading: Simonstein, F. Gene Editing, Enhancing and Women's Role. *Sci Eng Ethics* 25, 1007–1016 (2019). <https://doi.org/10.1007/s11948-017-9875-5>

Virtual session 8

Thursday 13th July 4pm – 6pm

Robert Ranisch

- **Germline interventions and the shadow of eugenics: ethical and social considerations**

Lecture: The ethics of germline genome editing often prompt references to eugenics, invoking both support and criticism for this technology. However, understanding the eugenic implications of germline editing proves challenging due to the diverse nature of historical eugenics movements. In this talk, I provide a brief overview of eugenics history, from its inception to 21st-century "liberal eugenics," emphasizing the limitations of drawing direct parallels to the past. However, by studying the history of eugenics, we can glean valuable insights while recognizing the need for cautious interpretation. This talk aims to foster a comprehensive understanding of the relationship between germline editing and eugenics, informing responsible decision-making and ethical advancements in scientific research.

Class engagement: Students will engage in examining current medical practices for potential eugenics elements. Collaborative discussions foster critical analysis, diverse perspectives, and connections between historical eugenics and contemporary medicine. This approach enables a deeper understanding of ethical complexities and societal implications in emerging technologies.

Virtual session 9

Friday 14th July – 4pm – 6pm

Uta Müller

- **Introduction into ethical argumentation**

Lecture: The developments in the field of bioethics in the last decades have brought an urgency to ethical discussions about the application of new technologies like genome editing. In our session we will focus on the basics of ethical reasoning. We will begin with some conceptual clarifications, like the difference between morals and ethics and the basic understanding of Applied Ethics. In our debates, we concentrate on the method of ethical argumentation.

One central method in ethical reasoning is to analyze a problem or a conflict following a certain path



of argumentation, which includes ethical evaluation with the help of norms, values, principles, impact assessments, risk considerations, etc. Thus, the participants will learn about the basic ethical approaches like deontological ethics, utilitarianism and the ethics of the “good life”.

Class engagement: The participants begin to discuss concrete examples in small groups. For the session in presence, on Friday 28th July, the participants should try to develop ethical argumentations using several examples (given during the virtual session or via email).

- **[short handout] Some points about the presentations (Oliver Feeney)**

Pitching a clear idea in 10 minutes; PowerPoint presentation layout, etc. Reviewing examples.

Virtual session 10

Wednesday 19th July – 4pm – 6pm

Emilian Mihailov

- **Gene editing and the problem of expressing ugly attitudes.**

Lecture: Gene editing can be applied to correct disease-causing gene mutations, but also to help couples to have a healthy child rather than one with a disability. Although people have reproductive freedom in liberal democracies, there are looming questions about what attitudes towards disabled people do these reproductive choices express. We will explore the relation between reproductive choices to use gene editing and ugly attitudes towards disabled people. Firstly, we will discuss differences between old and new eugenics and whether there might common strands of ideas. This will clarify where do we stand with accusations that the use of genetic technologies resembles old practices of eugenics. Secondly, we will analyze examples of ugly attitudes and deliberate how plausible is it that people express them when they make reproductive choices. As tools of analysis, we will use the distinction between devaluing disability and devaluing people with disabilities, the non-identity problem. In the last part, we will discuss two cases to identify what motivates people to avoid conceiving a fetus with a genetic defect and when these motives constitute ugly attitudes.

Class engagement: Group discussion of two case studies to be shared before the session.



Physical (Konferenzzentrum University of Tübingen)

Konferenzzentrum, Casino building,

Otfried-Müller-Straße 6, 72076 Tübingen



Thursday 27th July – Science

- **Registration** **9.00 – 9.30**
- **Welcome and introductions** **9.30 – 10.30**

- Words of welcome, introductions, instructions of survey, general guidance.

- Julia Skokowa **Gene & RNA Therapy Center at the Tübingen University – from basic science to clinical translation** **10.30 – 12.00**

- **Lecture:** In this session, I will describe the ways of the clinical translation of gene and RNA therapy approaches that are developing in the frame of the newly built “Gene & RNA Therapy Center, GRTC” at the University Hospital Tübingen. I will introduce the structure, the paths in the translation of gene and RNA therapy fields, and the potential next steps in further developing our center. We will discuss the main steps necessary for the clinical translation of Gene and RNA therapy approaches and how the collaborative work within the GRTC can accelerate this process. Especial attention will be made to the ethical questions of gene and RNA therapies and the integration of ethics at different steps of translational development. I will further focus on gene therapy of hematological disorders by applying gene editing with CRISPR nucleases. We will discuss the benefits and risks of such therapies for patients with inherited pre-leukemia bone marrow failure syndromes and how such therapies are developed from bench to bedside.
- **Class engagement:** We will begin by introducing the GRTC, the main translation paths of Gene & RNA Therapies, specifics of pre-leukemia bone marrow failure syndromes, and possible applications of gene editing tools to treat these patients. Next, students will be divided into two groups. The first group will develop the GRTC structure, which should cover essential aspects of a successfully functioning center. The second group will “develop” the path of gene editing-based therapy of a selected pre-leukemia bone marrow syndrome.

- **BREAK** **12.00 – 12.30**
- Ulrich Lauer **Oncolytic Virotherapy** **12.30 – 14.00**

- **Lecture:** Oncolytic viruses (OVs) are viruses that may help destroy tumor cells. They work by selectively infecting and replicating within tumor cells, causing the tumor cells to burst and to release newly built (progeny) viruses. These (progeny) viruses then infect also other hitherto uninfected nearby located tumor cells, triggering the body’s immune system to



attack the tumor from now on much better (this might also include any tumor cells that have spread throughout the body in the sense of building up metastases). Clinical trials have shown that OV_s can destroy cancer cells that are resistant to standard therapies. OV_s in combination with other cancer therapies can be more effective and there are over 100 clinical trials planned, ongoing or completed to investigate this novel approach. OV_s are generally well tolerated, the most common treatment-related side effects include fever, aches and pains, and tiredness for 1–2 days. While only four OV_s have been approved so far, there are more expected to come. Overall, OV_s may provide a way to directly destroy tumors and turn on the immune system to destroy tumor cells throughout the body (for reading: *Future Oncol.* 2022 Jul 12. doi: 10.2217/fon-2022-0440; online ahead of print).

- **Class engagement:** Focus on the hopes and fears of employment of genetically modified viruses in cancer therapies, including the ethical aspects of preclinical and translational research in cancer; how to teach tumor patients and their families about such a novel therapeutic approach.

● **BREAK/LUNCH** **14.00 – 14.30**

● **Walking and bus to town bridge (Neckarbrücke)** **14.30 – 14.50**

● **Tübingen Walking tour & walking lecture (starts at Neckarbrücke):** University of Tübingen from the Middle Ages and the early Renaissance. **Walking lecturer:** Hans-Jörg Ehni **14.50 – 16.00**

● **Walking and bus back to venue (Uni-Kliniken Berg stop)** **16.00 – 16.20**

● **BREAK (refreshments while afternoon session starts)** **16.20 – 16.30**

● Réka Haraszti **RNA Therapies** **16.30 – 18.00**

...Continued from Virtual Session 4

- **Lecture continued from virtual session 4:** This session will give a history of RNA therapies and lay down definitions in this field. We will get introduced to antisense oligonucleotides, siRNAs, miRNA-therapeutics, RNA editing technologies. We will further learn about how to use RNAs to edit the genome (RNA-based CRISPR) or to silence entire chromosomes (XIST). We will ponder about how the duration of effect differentiates RNA and gene therapies and how improving technology is closing this gap. We will also discuss class specific toxicities, the nature of a platform technologies and its advantages as well as disadvantages in drug development, including trial design, and a possible future of the regulatory landscape. We will briefly mention the N of 1 initiative in the oligonucleotide field.

- **Class engagement:** Answering questions, clearing up terms. Voting.

- **Neckarmüller for a beer or soft drink, followed by own plans**





Friday 28th July – Ethics

- Uta Müller **Ethics: Discussion of Examples** **9.30 – 10.30**

- **Lecture/Class engagement:** Following on from virtual session 8 above (Friday 14th July), the participants should try to develop ethical argumentations using several examples (given during the virtual session or via email).

- José M Carrascosa **Ethics of heritable genome editing from the scientist perspective** **10.30 – 12.00**

- **Lecture:** In this session we will deepen into the ethical differences between somatic and germline cells genome editing. Whereas safety issues are common for the edition of both kinds of cells, heritable human genome editing has additional ethical implications. Firstly, modifications would pass on to future generations and alter humanity gene pool. Secondly, the lack of possibility of future edited children to consent and the right of to-be-parents to decide about the genetic constitution of their offspring represents a serious ethical concern. Scientific perspective limits the discussion mainly to actually unresolved safety questions, like off- and in-target mutations or mosaicism that influence the risk/benefits balance. From a medical perspective the debate focuses on the pathological conditions that are suitable for heritable genome editing and whether more well-established methods like preimplantation genetic diagnosis (PGD) are more appropriate, limiting the need of editing technologies. New debates about which traits should be eradicated from humanity gene pool, and the morality itself of modifying the human genome broaden the scope of the controversy beyond the scientific and medical perspective to the whole society, changing the questions of how? and when? to that of whether? we should undertake heritable genome editing at all. The final part of the session will focus on the differences between therapy and enhancement, and disability versus normality, since heritable genome editing awakens a strong ethical debate in this field. The classical issue of the slippery slope associated with the development of new technologies will be analysed and contrasted with realistic scenarios. Finally, we advocate for a consensual governance of genome editing as in previous ethical controversies.
- **Class engagement:** TBD

- **BREAK** **12.00 – 12.30**

- Greg Bognar **Genome Editing and Ethical Theory** **12.30 – 14.00**

- **Lecture:** Genome editing raises fundamental issues in ethical theory: novel problems about the nature of harm, beneficence, reproductive rights, personal autonomy, individual liberty, and many other central moral concepts. In this class, we map out these issues. We begin by examining common moral intuitions about simple cases concerning medical and reproductive choices. We identify and clarify the basic moral concepts that play a role in our moral judgments, draw the relevant moral distinctions, and classify different genome editing proposals in terms of obligations, permissions, and prohibitions. The overall aim of the class is to furnish students with the conceptual tools to analyze the questions genome editing raises from an ethical perspective.
- **Class engagement:** The class is built on open-ended discussion of simple representative cases, small-group work and pair discussions. In the first half of the class, we will engage in teacher-led plenary discussions. In the second half, students will apply the concepts in pairs or small groups.

- **LUNCH** **14.00 – 15.00**



● Greg Bognar **Genome Editing and Risk-Benefit Analysis** **15.00 – 16.30**

- **Lecture:** This class departs from the tension between individually permissible choices (including choices about medical treatment and reproduction) and collective interests. Genome editing raises particularly stark examples of the possibility that individual choices lead to undesirable collective outcomes, especially when risks are distributed unevenly. We look at different ways that such problems can be addressed through policies and regulations, and analyze them from an ethical perspective. We will consider how societies may evaluate and regulate new technologies and the risks they pose from both the individual and the collective perspectives.
- **Class engagement:** Continuing from the activities of the previous lecture, we try to organize our findings into a practical ethical framework that can be applied to new technologies. Working in small groups, students apply the framework to some test cases. We conclude with an open-ended discussion of each group's experience of using our ethics framework as a decision-making tool.

● Movie viewing **'Human Nature' & discussion (& refreshments)** **16.30 – 18.30**

Saturday 29th July – Law, Governance and Public Engagement

● Greg Bognar **Genome Editing and Justice** **9.30 – 11.00**

- **Lecture:** It is widely recognized that genome editing technologies will raise questions about justice. Our aim is to situate these questions in the political philosophy literature on justice, addressing in particular the question of what obligations the state has with regard to them to its citizens. (Should access to these technologies be left to the market? Should they be provided within the public health system?) We also consider major theories of justice and discuss their implications for the regulation of genome editing.
- **Class engagement:** This class begins with an introductory lecture to connect genome editing to political philosophy. After the major theories of justice are introduced, we discuss, both together and in small groups, some cases that illustrate the differences and conflicts between different theories and their practical implications.

● **BREAK** **11.00 – 11.30**

● Aurélie Mahalatchimy **Human genome editing for research & EU Law** **11.30 – 13.00**

- **Lecture:** Like any new technique, human genome-editing techniques such as CRISPR-Cas9 need to be evaluated before they can be applied to humans. Whether the research is fundamental or clinical (to validate the results with a view to bringing a new medicine to market), it is essential to comply with a precise methodology that aimed at guaranteeing the fundamental rights of individuals as well as ensuring the safety (of people and biological material) during the conduct of the research. At first glance, the legal framework applicable to these various research operations is complex, and the relevant provisions are scattered across a variety of texts under both EU and national law. The relevant provisions regulating research using genome-editing techniques vary according to several criteria: the category of research (fundamental or clinical), the purpose (production of knowledge or marketing of medicinal products), the type of law applicable (national or extra-national) or the object of the research (somatic, germ-line or embryonic research). This session will identify and clarify the main European Union law requirements applicable to human genome editing in fundamental research and clinical research.



- **Class engagement:** The lecture will be divided into various times based both on text analysis to be made by sub-groups of students and on full class discussion for the key take-home messages to be highlighted and explained.

● **LUNCH (own plans)** **13.00 – 15.00**

● Aurélie Mahalatchimy **Human genome editing for therapy & EU Law** **15.00 – 16.30**

- **Lecture:** EU law applicable to human genome editing techniques used in a therapeutic context concerns medicinal products based on these techniques. It is based both on the unified legislative framework for advanced therapy medicinal products, and on a fragmented specific regulatory framework made up of uncertainties regarding the multiple guidelines applicable. In addition, the legal framework for human germline genome editing highlights national heterogeneities and European uncertainties.
- **Class engagement:** The lecture will be divided into various times based both on text analysis to be made by sub-groups of students and on full class discussion for the key take-home messages to be highlighted and explained.

● **BREAK** **16.30 – 16.45**

● Oliver Feeney **Public engagement & consensus building in genome-editing** **16.45 – 18.00**

- **Lecture:** In recent years, there have been numerous, urgent calls for public engagement and the desire for various degrees of social consensus before the technology proceeds in different directions, if at all. Various proposals of public engagement exist but there are numerous questions – ranging from who should be involved, the degree of input to decision-making, how top-down or empowering such engagement will or should be, as well as what we mean by consensus (what degree, over what, by who, etc).
- **Class engagement:** There will groups representing different perspectives (patient, persons with disabilities; scientists; polarised groups).

● **Pub quiz** **Café Haag (bar in town)** **21.00**

Tübingen Trivia Pub-Quiz

HANS GOTTSCHALK-STIFTUNG DR. KURT UND IRMGARD MEISTER-STIFTUNG
IN STIFTERVERBAND

C a f é H a a g
p r e s e n t s

**THE
TÜBINGEN TRIVIA
PUB QUIZ!**

**Starts @ 9pm
Saturday 29th July**

Organised by the Ethics of Genome Editing Research Unit,
Institute of Ethics & History of Medicine, Faculty of Medicine,
University of Tübingen and CIVIS.

VERANSTALTUNGSORT:

📍 von: Kino Atelier & Café Haag

Kino Atelier & Café Haag
Vor dem Haagtor 1
Tübingen
Baden-Württemberg
Deutschland

📅 Veranstaltungsdetails

📅 29. Jul. 2023 21.00 Uhr

📅 ZUM KALENDER HINZUFÜGEN

Free entry! Prizes! Raffles for a free beer!

For more details see: <https://www.arsenalkinos.de/events/tuebingen-trivia-pub-quiz>



Sunday 30th July - Tübingen Excursion

- **Exploring and free time:** City and environs → → → → → → and meet at castle at: **14.30**
- **Museum tour:** Castle Museum (incl. Discovery of Nucleic Acid museum) **15.00**
- **Boating/punting on the River Neckar** **17.00**



Monday 31st July – Student presentations followed by Event dinner

One-day Symposium: each student will give a 10-minute presentation, with 5 minutes for Q/A

- Approx. 23 presentations (10 mins each & 5mins discussion), in panels of 5. (& slight buffer)
- 09.00 – 10.30: Panel 1 (90mins = 5 x 15 min (10 PP presentation 5 Q/A)
- 10.30 – 11.00: Break
- 11.00 – 12.30: Panel 2 (90mins = 5 x 15 min (10 PP presentation 5 Q/A)
- 12.30 – 13.00: Short Lunch
- 13.00 – 14.30: Panel 3 (90mins = 5 x 15 min (10 PP presentation 5 Q/A)
- 14.30 – 14.45: mini-Break
- 14.45 - 16:15 Panel 4 (90mins = 5 x 15 min (10 PP presentation 5 Q/A)
- 16.15 – 16.30: mini-Break
- 16.30 – 17.30: Panel 5 (60mins = 3 x 15 min (10 PP presentation 5 Q/A)
- 17:30 – 18:30: Wrapping up BIP, Certs & next steps (publication, online seminars)

- **Farewell dinner and drinks (Marquardtei-Schnitzelakademie)** **20.00**

Physical event ends

Resumption of virtual component (non-obligatory):

- Working meetings focusing on creating a joint-authored article(s): planning and ongoing writing schedule. 1 October - until the task is completed
- Online Ethics of Genome Editing (EGE) seminar series (details to follow): 1 Oct - 31 Nov 2023

For any queries, please contact Programme co-ordinator, Dr Oliver Feeney: oliver.feeney@uni-tuebingen.de
(Ethics of Genome Editing Research Unit, supported by the Dr. Kurt und Irmgard Meister-Stiftung and the Hans Gottschalk-Stiftung).

Organising Committee: Oliver Feeney (BIP Coordinator), Greg Bogнар, Emilian Mihailov, José María Carrascosa, Julia Skokowa, Aurélie Mahalatchimy, Robert Ranisch, Uta Müller, Garðar Árnason, Hans-Jörg Ehni, Martina Ebi, Anne Glaser.



Event kindly supported by: Medizinischen Fakultät & Institut für Ethik und Geschichte der Medizin, Universitätsklinikum Tübingen, and CIVIS: A European Civic University.

The coordinating role of the Ethics of Genome Editing (EGE) Research Unit is kindly supported by the Dr. Kurt und Irmgard Meister-Stiftung and the Hans Gottschalk-Stiftung.

Supported by

DR. KURT UND IRMGARD
MEISTER-STIFTUNG
IM STIFTERVERBAND

HANS GOTTSCHALK-STIFTUNG