

Introduction to Law and Ethics

Introduction

Fall 2025

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Teachers

- Sandra Hotz
- Elodie Malbois
- Invited speakers: Xavier Warot, Gaia Barazzetti, Sylvain Poitras

Teachers

- Prof. Sandra Hotz
 - Professor of Health Law and Civil Law, University of Neuchâtel
- Dr. Elodie Malbois
 - Maitre-Assistante, Institute for Ethics, History, and Humanity, University of Geneva
 - Scientific collaborator, National Advisory Commission on Biomedical Ethics
 - Research and teaching areas: biomedical ethics, research ethics, ethics of new technologies

Objectives

- Understand the role of law and ethics in the field of life sciences
- Become familiar with the basic concepts of law and ethics applicable to life sciences research and its transfer into applications
- Acquire the essential elements for identifying legal and ethical issues in future professional practice

Teaching Assistant

- Margot Vogelsperger
(margot.vogelsperger@epfl.ch)

Course overview

- 1.5 hours of class per week
- No in-person exercise sessions (free organization for group work and reading)
- Moodle: slides, readings, practical information
- Assessment:
 - Oral exam (2/3 of the final grade)
 - Written group assignment (1/3 of the final grade)
- E-learning TRREE <http://elearning.trree.org>
 - Modules 1 and 2
 - Certificate of completion to be submitted on Moodle by October 13



Welcome to the TRREE on-line training programme on the ethics and regulation of health research involving human participants. [Read More »](#)

Latest announcements

September 2 2024
Publication of the Ivory Coast's Regulatory Framework

August 23 2024
ISFM/FMH recognition of

<https://www.youtube.com/?hl=FR>

E-Learning Modules

a web-based learning program and certification

Module 1

Introduction to Research Ethics NEW!

[EN] [FR] [DE] [ES] [PT] [PL] [SW] [HY]

Module 2

Research Ethics Evaluation NEW!

[EN] [FR] [DE] [ES] [PT] [PL]

National or local regulatory frameworks
local experts explain requirements in their country

Africa

Cameroon [FR]

Côte d'Ivoire [FR]

Kenya [EN]

Mali [FR]

Nigeria [EN]

Group work

- Group work (4 people): Graded exercise & exam preparation in the form of a group report on 4 given questions
- Distribution of questions within the group:
 - Questions 1-4: each group member works on one question (max. 1 page per question)
 - Comments in pairs within the group to improve each text
 - Revision and submission of the final text on Moodle

Questions for group work

- Should the regulations and ethical principles for research with animals be the same as for humans?
- Is the use of cognitive enhancement purely an individual and private matter that the state should not regulate?
- What is the right not to know, and what does it mean in the age of genomics?
- What are the legal and ethical challenges of research involving individuals who lack the capacity to give informed consent (e.g., children)?

Group work: comments in pairs

- Defending a thesis using logically valid, clear, and reasonable arguments
- Constructive feedback:
 - Describe what you see/read/observe without judging it directly.
 - What is positive? Be specific in your response.
 - What points could be clarified?

→Goal: improving texts

Detailed instructions will soon be available on Moodle.

Group work: submission

- One PDF per group with the 4 essays
- Per email to elodie.malbois@unige.ch AND sadra.hotz@unine.ch
- Other group members in cc.

Important deadlines

Date	Task	How
October 7	Group formation (Random assignment if no group)	Moodle
October 13	Submission of TRREE module 1 and 2 certificates of completion	Moodle
November 26	Deadline for writing texts	Email to other group members
December 3	Deadline for comments	Comments sent to author
December 10	Submission of group report	Moodle

Topics covered

- Introduction to law
- Research on humans and animals
- Integrity in research
- Intellectual property
- Therapeutic products
- ...

Research ethics?

- What?
- Why?

Research ethics: why?

- Albert Neisser, a famous Prussian dermatologist, inoculated 15 prostitutes with syphilis in the hope of vaccinating them.
- All of them contracted the disease. The youngest was ten years old.
- None of them were aware of the experiment.
- A scandal erupted, followed by intense debate about human experimentation.
- The resulting Prussian code of 1900 was the first national code of research ethics.
- Neisser was fined.



Today

LE TEMPS

EN CONTINU MONDE SUISSE ÉCONOMIE RÉVOLUTIONS OPINIONS CULTURE SOCIÉTÉ SCIENCES SPORT CYBER ARTICLES AUDIO VIDÉOS PODCASTS CHARITÉ

ACCUEIL > SCIENCES

Une année après, le fiasco des bébés génétiquement modifiés

Fin 2018, le chercheur chinois He Jiankui annonçait avoir utilisé la méthode d'édition du génome CRISPR-Cas9 sur des embryons humains, une procédure largement décriée. Selon de nouvelles révélations, la procédure n'a pas eu l'effet escompté et a introduit des mutations imprévues



ECONEWS

ECONOMY MOBILITY ENERGY TECHNOLOGY ENVIRONMENT ECOTICIAS CONTACT

Elon Musk unveils his next plan with Neuralink to the FDA: This has never been done on a human being before

by Edwin O. — 09/08/2024 in Technology



Painting the mice

- In 1974, William Summerlin claimed to have successfully performed an interspecies transplant on mice of different colors.
- In reality, he had painted spots on white mice with a permanent marker



Today

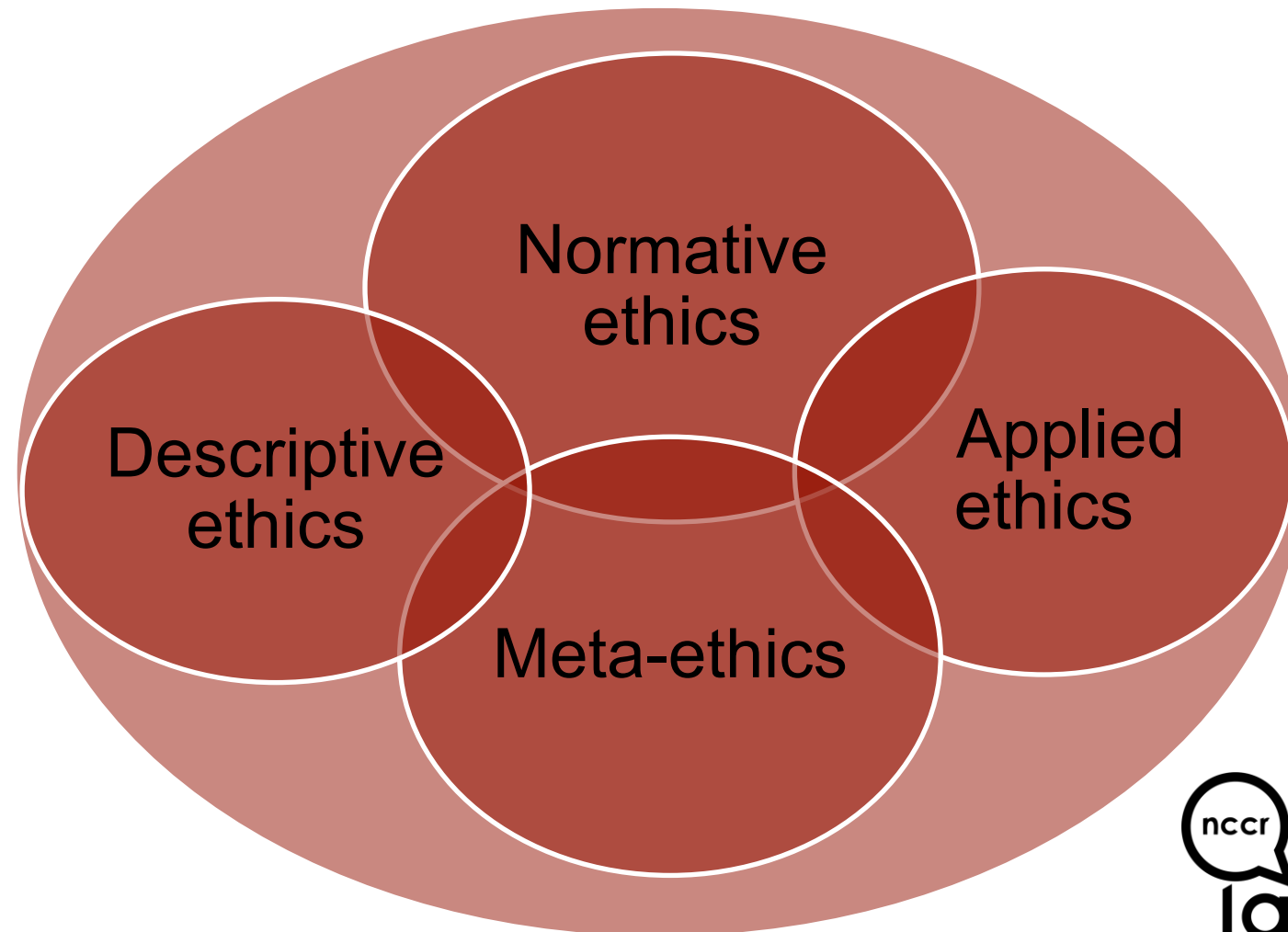
The screenshot shows the Le Monde website homepage. At the top, there is a navigation bar with the Le Monde logo and a 'Se connecter' button. Below the navigation bar, there is a main banner for 'L'HEURE DU MONDE' with the text 'Le Monde PODCASTS', 'LE TEMPS DE L'ÉCOUTE', and 'Disponibles sur toutes les plateformes de podcasts'. The main article is titled 'La physique au bord d'un scandale de fraude scientifique majeure' and is categorized under 'SCIENCES - PHYSIQUE'. The article text reads: 'Depuis la parution, en mars, d'un article sur un matériau supraconducteur très prometteur, les doutes se sont accumulés sur l'intégrité des données et du principal coauteur, le chercheur américain Ranga Dias. Deux articles ont été déjà rétractés.' The author is David Larousserie, and the article was published on October 1, 2023, at 19h00, with a 2-minute reading time.

The screenshot shows the Le Point website article page. The article is titled 'Fraude scientifique : la nouvelle combine' and is categorized under 'Sciences & Innovations • Sciences'. The article text reads: 'Des chercheurs ont découvert une nouvelle forme de fraude scientifique pour booster artificiellement l'impact des recherches.' The author is Lonni Besançon and Guillaume Cabanac with Thierry Viéville, for The Conversation France. The article was published on October 15, 2024, at 14h15. There is a photo of two researchers in a lab setting, one looking through a microscope. To the right of the photo is a small graphic with the text '« Papa, c'est quoi ton empreinte écologique ? »' and a cartoon character.

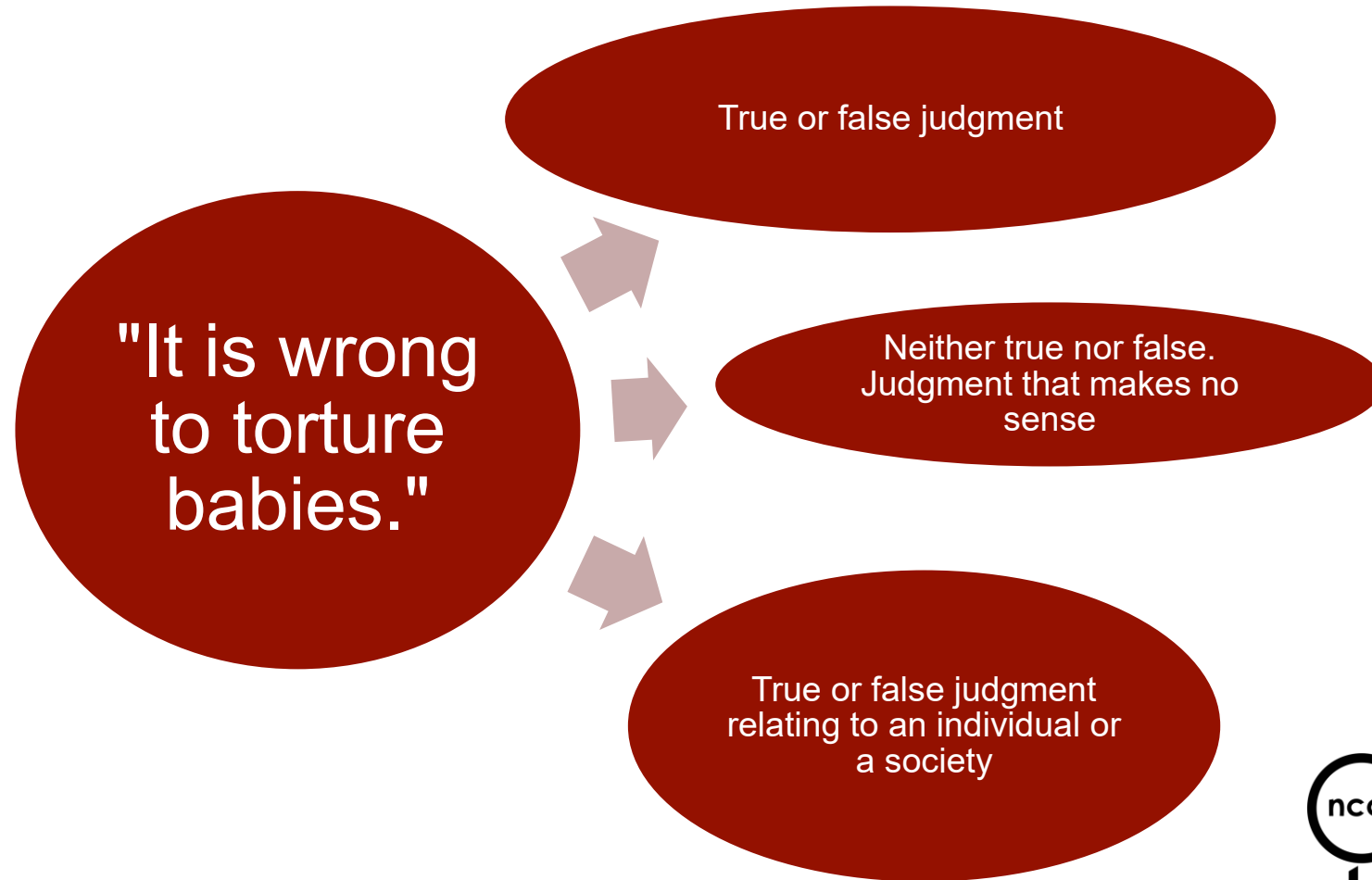
Research ethics

- What?
 - Is a scientific breakthrough desirable/acceptable?
- How?
 - How can research be conducted in an acceptable/respectful manner?

What is ethics?



Meta-ethics



Moral theories

- One or more fundamental principles that enable us to distinguish between good and bad actions
- These universal principles determine
 - What is permitted and what is not
 - Our rights and duties
 - What is required and what is supererogatory
- We will not study moral theories (utilitarianism, deontology, virtue ethics)

Normative and factual planes

- Hume's law: facts and norms are not on the same level
- Factual level: what is—true or false, (scientific) method for determining whether something is a fact
- Value level: what is good, what ought to be
- Implication: Moral principles cannot be deduced from facts
- Moral arguments and theories are always based on moral intuition.
- Moral intuition is all the more powerful when it is shared and consistently verified in many situations



Infractions to Hume's law

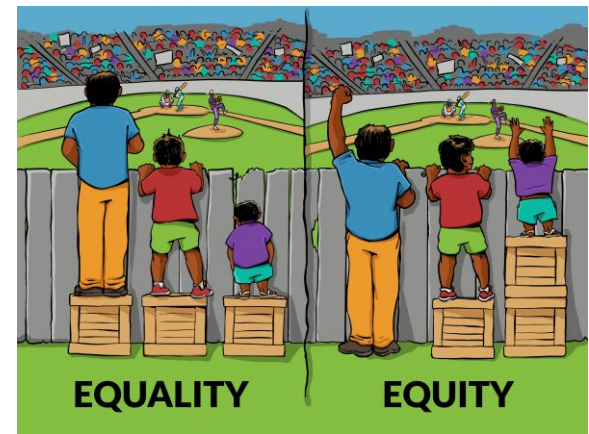
- Examples?



Principle of formal equality



- If two individuals are equal in a certain respect, they must be treated equally in that respect. (Aristotle, Nicomachean Ethics, V.3. 1131a10-b15; Politics, III.9.1280 a8-15, III. 12. 1282b18-23)
- E.g., if we want to treat individuals differently, we must be able to demonstrate that they are not equal (e.g., humans/animals).



The Violinist Case

- “You wake up in the morning and find yourself back to back in bed with an unconscious violinist. A famous unconscious violinist. He has been found to have a fatal kidney ailment, and the Society of Music Lovers has canvassed all the available medical records and found that you alone have the right blood type to help. They have therefore kidnapped you, and last night the violinist's circulatory system was plugged into yours, so that your kidneys can be used to extract poisons from his blood as well as your own. [If he is unplugged from you now, he will die; but in nine months] he will have recovered from his ailment, and can safely be unplugged from you.” Thomson 1971, pp. 48–49;

Duty implies power



- Immanuel Kant (1724-1804):

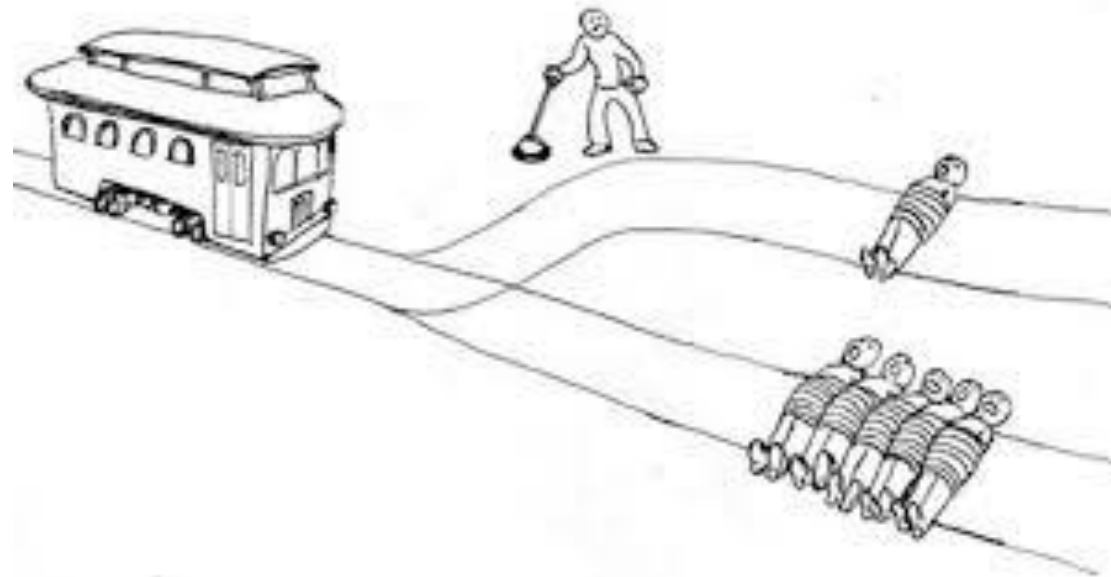
"For if the moral law commands that we 'must' be better human beings now, it inevitably follows that we must be 'able' to be better human beings." (Kant, Religion within the Limits of Reason Alone, 6:50, p. 94).

- There is a limit to what morality can ask of us
- Ex 1: How much should we give to help disadvantaged people? How much effort should we make for the environment?
- Ex. 2: I don't have a duty to save someone from drowning if I can't swim.

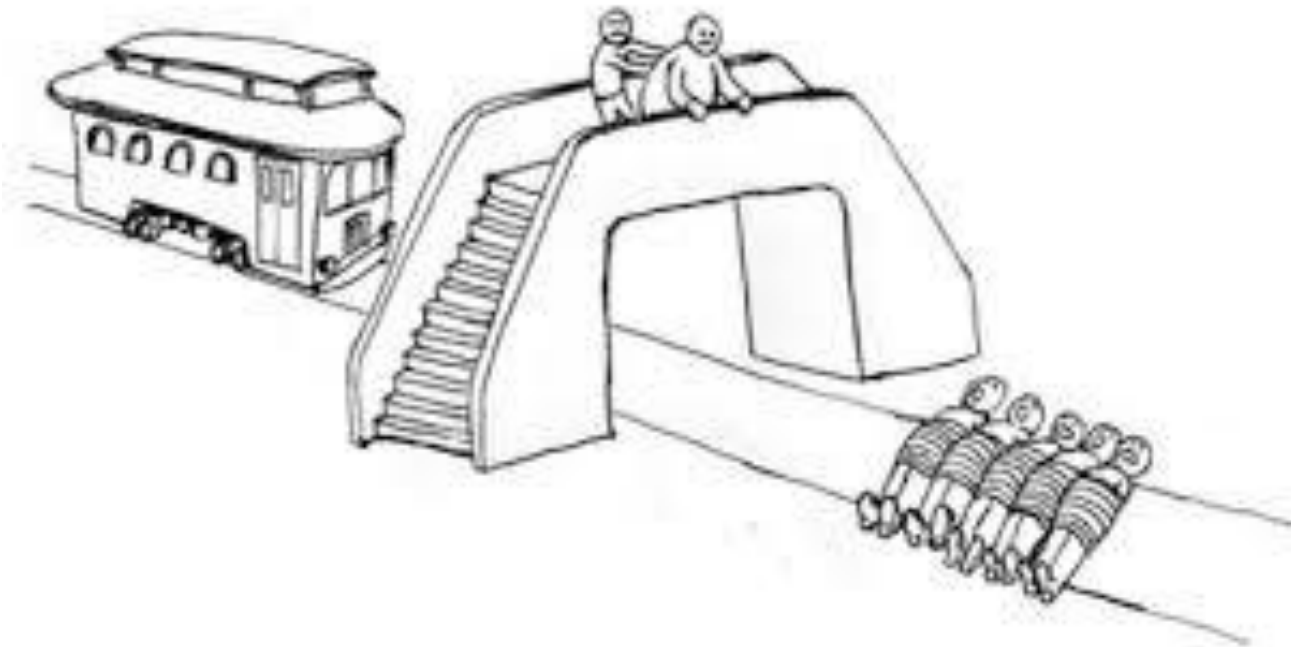
Thought experiment

- “Julie and Mark are brother and sister. They are traveling together in France on summer vacation from college. One night they are staying alone in a cabin near the beach. They decide that it would be interesting and fun if they tried making love. At the very least it would be a new experience for each of them. Julie was already taking birth control pills, but Mark uses a condom too, just to be safe. They both enjoy making love, but they decide not to do it again. They keep that night as a special secret, which makes them feel even closer to each other. What do you think about that? Was it OK for them to make love?” (Haidt, 2001, p. 814)

Trolley case 1



Trolley case 2



Applied ethics

- Ethical issues relating to a specific field
 - Bioethics
 - Business ethics
 - Environmental ethics
 - Animal ethics
 - Education ethics
 - ...

Ethical questions in this course

- Questions:
 - Ethics of research involving human subjects:
 - When can we conduct research on human subjects?
 - What risks to participants are acceptable?
 - How can we conduct research on vulnerable individuals?
 - Ethics of research involving animals:
 - When is it acceptable to conduct experiments on animals?
 - What ethical principles must be respected and why?
 - Research integrity
 - What are the principles of integrity in research?
 - Why are they important?
 - Enhancement
 - When is it ethically acceptable to enhance?
 - Personalized medicine
 - What are the ethical questions related to personalized medicine?