

# Joanna. A. Sleigh

Department of Health Science and Technology | ETH Zürich, Zurich 8092, Switzerland

[joannasleigh.me](http://joannasleigh.me) | [joanna.sleigh@hest.ethz.ch](mailto:joanna.sleigh@hest.ethz.ch)

ORCID: 000-0001-9600-3262

## CURRENT POSITION

**Postdoctoral Researcher**, 2023-Present

Health Ethics and Policy Lab,

Department of Health Sciences and Technology (D-HEST),

ETH Zürich (Swiss Federal Institute of Technology), Switzerland.

## EDUCATION

**PhD**, Doctor of Sciences, 2023

ETH Zurich, Switzerland

Thesis: "Visualizing Ethical Data Governance Frameworks in Health Research"

**MA**, Visual and Media Anthropology, 2018

Frei Universität Berlin, Germany

Thesis: "Experiences of Donating Personal Data to Mental Health Research: an Explorative Anthropological Study"

**BA**, Bachelor of Arts, 2014

The University of Sydney, Australia

Major: Art History and Digital Cultures

## RESEARCH AND TEACHING INTERESTS

Applications and evaluations of large language models (LLMs) and Large multi-modal models (LMMs) for ethical decision-making

Digital methods for social science research

Generative AI in science communication

Societal and environmental impacts of emerging technologies

Persuasive technology design

Knowledge visualisation

## CONFERENCE PRESENTATIONS

"Assessing Fact Production: AI and the Dynamics of Open Source Investigations,"

EASST-4S, Amsterdam, 2024

"Visualising Data Shadow Donation," Crafting the Future of the Visual Essay, University of Antwerp, Antwerp, 2022

"Ethics of Communication During the Covid-19 Infodemic," World Congress of Bioethics Conference, Basel, 2022

"Enhancing Dialogue to Bridge the Gaps in Bioethics," European Association of Centres of Medical Ethics Conference (EACME), Varese, 2022

"Visualising Health Data Ethics," Knowledge Visualisation Science Lunch, Zurich University of the Arts (ZHdK), Zurich, 2021

"Civic Engagement and the Visual Imperative," EAST-4S, Online, 2020

"Visualising Ethical Frameworks and Policy Documents in Digital Spaces," EU Data Visualisation Conference, Luxembourg, 2019

"Navigating Health Data Ethics with Interactive Knowledge Maps" Navigating Knowledge Landscapes' International Conference, Ljubljana, 2019

“Policy Complexity and Visualisation,” Stavros Niarchos Foundation Bioethics Academy (SNFBA), Athens, 2019

“Anthropological Research on Experiences of Social Media Data Donation,” Innovation and Strategies for Digital Interventions in Mental Health, Westminster Abbey, London, 2017

## CONTINUING EDUCATION

Health Data and AI: Responsible Innovation, Ethics and Regulatory Strategies (HealthDARES), ETH Zurich, Switzerland, 2024

IDEA League Summer School, ETH Zürich, Switzerland, 2021

Filmmaking For Scientists Workshop, ETH Zürich, Switzerland, 2022

Information Is Beautiful Workshop, Online, 2022

Digital Methods Winter School, University Of Amsterdam, Netherlands, 2018

## TEACHING AND MENTOR EXPERIENCE

### Workshop Facilitation

Digital Methods Winter School, University Of Amsterdam, 2024

- Guided masters and doctoral students on qualitative content analysis for developing a ChatGPT trustworthiness matrix.

### Course Development, Evaluation and Coordination

The Impact of the Digital Life on Society, ETH Zürich, 2018-Present

- Developed a didactic concept to teach bachelor and masters students about the societal and ethical impacts of emerging technologies
- Coordinated and co-instructed the course
- Graded student works

The Digital Life Workshop, Amgen Scholars Program, 2022

- Developed a didactic concept introducing technology ethics to master students in the field of robotics, informatics and biotech
- Co-instructed the workshop

Ethics & Scientific Integrity for Doctoral Students, ETH Zurich, 2019

- Assisted and advised in the content development and digitalisation of the online module teaching scientific integrity for doctoral students

Data Visualisation Workshop, École Polytechnique Fédéral de Lausanne (EPFL), 2022

- Instructed social science researchers on the use of digital tools and visualisation for research and research translation work

### Learning Materials and Resource Development

- Resources on Using AI in Research and Education, developed resources and policy briefs to provide staff and students with guidance on AI applications
- Scientific Integrity Game, conceptualised a digital education ethics game sensitising doctoral students and early career researchers in STEM. Future Learning Initiative (FLI)
- Health Data Ethics Map, developed an online course and interactive visualisation about responsible health data use for health researchers
- Ethics Resource Platform, wrote case studies and curate a collection of ethics resources for bachelor and masters students
- Covid19 Ethical Issues, developed website mapping ethical concerns and providing researchers, students and staff with resources to address these
- Cyber@School Ethics Module, developed learning materials to sensitise high school students to accessibility issues

## **Mentorship**

- Mentored masters students in researching the intersection of AI ethics in medicine and climate research, Translational Research Internships (TRIs), ETH Zürich, 2024
- Guided and evaluated master students' final projects translating climate data into interactive knowledge visualisations, ZHdK, 2023-2024
- Coordinated internships for bachelor and masters students, Health Ethics & Policy Lab and focusTerra, 2020-Present
- Evaluated master thesis work "Public perception of carbon dioxide: A quantitative analysis of the German speaking region in Switzerland," 2023.
- Evaluated master thesis work "On the perception of CO2 and CO2-related topics," 2023
- Advised a visual and media anthropology master student developing a tool (Migr-ai-tion) to correct for AI bias in migrant population automated image annotation, 2022

## **RESEARCH EXPERIENCE**

### **Postdoctoral Researcher, 2023-Present**

Health Ethics & Policy Lab, Department of Health Sciences and Technology, ETH Zürich

- Implement and instruct digital methodologies for bioethics teaching and research
- Conduct research systematic mapping and heuristic evaluation of digital ethics tools
- Facilitate interdisciplinary collaboration through AI Ethics & Policy Network
- Foster engagement through internal events and public exhibitions
- Translate research into visualisations for colleagues and partner organisations

### **Doctorate Researcher, 2018-2023**

Health Ethics & Policy Lab, Department of Health Sciences and Technology, ETH Zürich

- Researched visual communication for health data governance and health policy
- Applied mixed-methods research (visual rhetorical analysis, co-design, scoping review, statistical analysis (R), user experience assessment, and more)
- Developed new research tools and education resources
- Taught courses on technology ethics

### **Research Assistant, 2014-2017**

Health Ethics & Policy Lab, Department of Health Sciences and Technology, ETH Zürich

- Coordinated teaching and education activities
- Supported research activities with data analysis and project reporting
- Managed lab communications and event logistics

### **Administrative Assistant, 2017-2018**

Institute Of Social & Cultural Anthropology, Freie Universität Berlin

- Supported research initiatives within the learning program

## **FURTHER EXPERIENCE**

Director of Communications, AI Ethics & Policy Network, 2024

Exhibition Project Manager, focusTerra, 2023

Communications Coordinator, Carriageworks, 2015-2016

Creative Media Coordinator, Pozible, 2012-2014

## **POLICY VISUALISATION**

Ethics and Governance of Artificial Intelligence for Health: Guidance On Large Multi-Modal Models, World Health Organisations (WHO), 2024

- Created visual summaries of the principles, LLM value chain, and recommendations

Ethical Principle Co-Design, 2024

- Co-created with early-stage health researchers illustrations of the ethical principles Respect of Persons, Privacy, Accountability, and Data Fairness to create visible, tangible referents to explain and concretise these concepts.

Ethical Framework for Responsible Data Processing in Personalized Health Research,  
Swiss Personalised Health Network (SPHN), 2021

- Used axial-coding and rapid prototyping to translate the framework into an interactive knowledge visualisation tool

## ARTWORKS, FILMS, AND EXHIBITIONS

**Keep It Cool: Tech to the Rescue?** (Exhibition), *focusTerra*, Earth Sciences Department of the ETH Zürich, 2025-2027

**Health Data Ethics Digital Platform** (Installation), ETH Digital Health Conference, 2018; Zurich Digital Festival, 2019.

**Navigating Health Data Ethics** (Exhibit) Visualizing Knowledge 2019 (VK19), Aalto University, Helsinki, 2019

**Interactive Ambient Data Shadow Visualisation** (Artwork), International Conference of Data Protection and Privacy Commissioners, Brussels, Belgium, 2018; Tartu World Film Festival, Estonian National Museum, Tartu, Estonia, 2018; Conference of the German Anthropological Association (GAA), Berlin, Germany, 2017

**Google a Religion** (Documentary) NAFA Film Festival, Bergen, Norway, 2016

**Infinite Deferral of Meaning** (Artwork), the Art Gallery of NSW, Sydney, Australia, 2011

## NETWORKS AND COMMUNITIES

AI Ethics and Policy Network of ETH Zürich, Director of Communications

European Association for the Study of Science and Technology (EASST)

European Network of Science Centres and Museums (ESCITE)

Radical Data Project

Creative Coding and Live Audio Visual Community

The German Association of Social and Cultural Anthropology

## AWARDS AND SCHOLARSHIPS

Winner, the American Society of Bioethics and Humanities Graphic Art Design Competition, 2020

Deutschlandstipendium, 2018

## GRANT WRITING

“Data Ethics Framework for Decision Makers,” Policy Visualisation Project Proposal, Doctors Without Borders / Médecins Sans Frontières (MSF), 2022

“ETHics Resource Platform Development,” ETH Zürich, 2020

“Digital Health Innovation: a Governance Roadmap for Switzerland,” the National Research Programme (NRP 77), Digital Transformation, Ethics, Trustworthiness and Governance, 2019

“Digital Faces: the Ethics and Governance of Facial Recognition Technologies,” Swiss National Science Foundation, 2018

## LANGUAGES

English, native

German, C1

## DIGITAL TOOLS AND PROGRAMMING LANGUAGES

4CAT

MAXQDA

Raw-Graphs

Illustrator

Voyant-Tools

SPSS

PixPlot

PremierPro

Zeeschwimer

R

Microsoft Suite

Qualtrics

HTML

InDesign

## REFERENCES

Prof. Dr. Effy Vayena  
Professor of Bioethics,  
ETH Zurich,  
Switzerland  
Email: [effy.vayena@hest.ethz.ch](mailto:effy.vayena@hest.ethz.ch)  
Phone: [+41 44 632 83 01](tel:+41446328301)

Prof. Dr. Marcello Ienca  
Professor of Ethics of AI & Neuroscience,  
Technical University of Munich,  
Germany,  
Email: [marcello.ienca@tum.de](mailto:marcello.ienca@tum.de)  
Phone: [+49 089 4140 4041](tel:+4908941404041)

## PUBLICATIONS

- Sleigh, J.**, Hubbs, S., Blasimme, A., & Vayena, E. (2024). Can Digital Tools Foster Ethical Deliberation?. *Nature Humanities and Social Sciences Communications*. 11, 117.
- Sleigh, J.** (2023). Visualising Ethical Frameworks for Health Data Governance (Doctoral Dissertation, ETH Zurich).
- Sleigh, J.**, Ormond, K., Schneider, M., Stern, E., & Vayena, E. (2023). How Interactive Visualisations Compare to Ethical Frameworks as Stand-Alone Ethics Learning Tools for Health Researchers and Professionals. *AJOB Empirical Bioethics*.
- Sleigh, J.**, & Amann, J. (2022). Fostering Ethical Reflection on Health Data Research Through Co-Design: a Pilot Study. *International Journal of Ethics Education*, 7(2), 325-342.
- Sleigh, J.**, Amann, J., Schneider, M., & Vayena, E. (2021). Qualitative Analysis of Visual Risk Communication on Twitter During the Covid-19 Pandemic. *BMC Public Health*, 21(1), 1-12.
- Sleigh, J.**, & Vayena, E. (2021). Public Engagement With Health Data Governance: the Role of Visuality. *Nature Humanities and Social Sciences Communications*, 8(1), 1-12.
- Sleigh, J.**, Amann, J., Schneider, M., & Vayena, E. (2021). Qualitative Analysis of Visual Risk Communication on Twitter During the Covid-19 Pandemic. *BMC Public Health*, 21(1), 1-12.
- Amann, J., & **Sleigh, J.** (2021). Too Vulnerable To Involve? Challenges of Engaging Vulnerable Groups in the Co-Production of Public Services Through Research. *International Journal of Public Administration.*, 44(9), 715-727.
- Amann, J., **Sleigh, J.**, & Vayena, E. (2021). Digital Contact-Tracing During the Covid-19 Pandemic: an Analysis of Newspaper Coverage in Germany, Austria, and Switzerland. *Plos One*, 16(2), E0246524.
- Scheibner, J., **Sleigh, J.**, Ienca, M., & Vayena, E. (2021). Benefits, Challenges, and Contributors to Success for National eHealth Systems Implementation: a Scoping Review. *JAMIA*, 28(9), 2039-2049.
- Sleigh, J.**, Schneider, M., Amann, J., & Vayena, E. (2020). Visualizing an Ethics Framework: a Method To Create Interactive Knowledge Visualizations From Health Policy Documents. *Journal of Medical Internet Research*, 22(1), E16249.
- Gasser, U., Ienca, M., Scheibner, J., **Sleigh, J.**, & Vayena, E. (2020). Digital Tools Against COVID-19: Taxonomy, Ethical Challenges, and Navigation Aid. *The Lancet Digital Health*, 2(8), E425-E434.
- Sleigh, J.** (2020). Visualizing Data Shadow Donation. Translating Data Shadows and Their Donation Into an Interactive Visual Form." *Anthrovision. Vaneasa Online Journal* 8.
- Ienca, M., Scheibner, J., Ferretti, A., Gille, F., Amann, J., **Sleigh, J.**, ... & Vayena, E. (2019). How the General Data Protection Regulation Changes the Rules for Scientific Research: Study (Pp. QA-04). ETH Zürich.
- Sleigh, J.**, (2016). Entering the Space of Data. *Journal of Visual and Media Anthropology*, 2(1).