

BRIEF

BIOROBOTICS

RESEARCH AND

INNOVATION

ENGINEERING FACILITIES

D.7.7 REPORT ON RESEARCH DISSEMINATION AND
AWARENESS (FINAL)



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1. INTRODUCTION

This report illustrates the activities of research dissemination and awareness-raising that have been carried out within the WP7. The final version of this report updates the version published in December 2023. All the new additions are written in green ink. Emphasis is given to the activities planned for the achievement of the KPIs in terms of publications. As described in the grant agreement, the outputs of WP7 in terms of newly generated knowledge on the relevant legal framework encompass 3 journal articles, 6 book chapters and 9 articles in conference proceedings, as reported in Figure 1. Moreover, it was anticipated to disseminate the results through three awareness panels, two workshops and 24 policy briefs. As this report will detail, the KPIs defined in the plan for publications and the dissemination and awareness activities have been reached and even exceeded.

45 Objective, quantitative, and measurable indicators relevant to the monitoring and ex-post assessment of the expected results:

Title	Bimester	Objective, quantitative, and measurable indicators
Objective 7.1: Setup of the Law and Policy Hub and Stakeholders engagement	3	Successful submission of D7.1 and D7.2
Objective 7.2: Cross-field Regulatory Analysis	10	Successful submission of D7.3 and D7.4
Objective 7.3: development of new knowledge on the relevant legal framework	15	Successful submission and update of all WP7 deliverables. Targeted KPIs on a 3 years timeframe are: •JPUB_TOT: 3 •CPUB_TOT: 9 (with approximately equal distribution among CPUB_INT/NAT/SOU) •BPUB_CHA: 6 •PBRI_PUB: 24

Figure 1. Indicators of achievement of the WP7 results extracted from the grant agreement. For the purpose of this report, we focus on the last row reporting the number of expected publications

KPI	Description	Measurement units	Timing of update
PERS_TRAIN	Status of training of WP7 personnel with respect to the plan (training courses are organized in WP1)	%	Each 2 months
JPUB_TOT	Scientific publications in international journals enabled by BRIEF WP7	Number	Each year
CPUB_TOT CPUB_INT CPUB_NAT CPUB_SOU	Number of scientific publications enabled by BRIEF WP7 presented at conferences and events, and breakdown (total, international, national, conferences in the southern Italian regions)	Number	Each 6 months
BPUB_MON BPUB_CHA	Total number of book contributions enabled by BRIEF WP7, and breakdown (monographies, chapters)	Number	Each 6 months
PBRI_PUB	Total number of policy-brief published	Number	Each 3 months

Figure 2. KPIs from the grant agreement that illustrate the meaning of the acronyms of the planned publications

2. PUBLICATIONS

Thanks to the thorough analysis carried out during the BRIEF project that includes a mapping of relevant normative sources across various disciplinary fields (see “D7.5 Cross-field

regulatory analysis - final”) and the needs in terms of legal support of BRIEF’s stakeholders explored through a survey (see D7.2), it was possible to identify areas of research and practice that acquire particular importance for carrying out trustworthy-by-design research and innovation in the robotics and biorobotics fields. The members of the Law and Policy Hub (LaPoH), which was set up at the beginning of the project and was provided of an Advisory Board of experts in various disciplines (see D7.1), offer multifaceted and interdisciplinary expertise that generates knowledge on various topics where the law imposes constraints and provides enablers for bioengineering research and innovation, spanning across artificial intelligence and robotics, personal and non-personal data management, intellectual property, health law, liability and risk management, cybersecurity and research ethics. In order to meet the established goals, a publication strategy was devised by the two technologists hired on BRIEF that includes the contribution of scholars within and outside of the Law and Policy Hub as well as of members of other BRIEF’s WPs for a truly interdisciplinary perspective.

Annex I lists all publications that can also be found on a dedicated webpage on the project’s website.¹ Whenever it was possible, the academic contributions were published in gold open access.

2.1. Journal articles

Eleven journal articles have been published and one is in press, exceeding the initial goal of 3 journal articles. The venues are highly reputed international journals, such as Neurocomputing, Journal of European Consumer and Market Law (EuCML), *Opinio Juris in Comparatione* (see Appendix I for details), Computer Law and Security Review, the European Journal of Risk Regulation; Internet Policy Review; and JMIR (Journal of Medical Internet Research) Human Factors. The articles cover a broad range of topics, ranging from data sharing and the reuse of health data, product liability, to consent management and privacy interfaces.

2.2. Book chapters

A collective volume titled *Enabling and Safeguarding Personalized Medicine* and edited by the two BRIEF’s technologists, i.e., Francesca Gennari and Arianna Rossi (together with Federica Casarosa, a technologist working on the project SoBigData.it)² has been published by Springer’s Data Science, Machine Intelligence, and Law in 2025. This volume, completely in open access, provides a comprehensive guide to the most pressing challenges arising from the technologies that enable personalized medicine. It brings together theoretical, empirical, and case study-based contributions that span across disciplinary boundaries to examine related problems and propose solutions critically.

The book is organized in three sections: I) “Facilitating and Protecting Personalized Medicine,” which revolves around the mechanisms that enable the sharing and reuse of health data within the Common European Data Spaces, seeks to address the cybersecurity challenges posed by medical technologies, and critically discusses the definition of scientific research in recent legislative efforts; II) “Scoping Challenges Through the Players in the Personalized Medicine Ecosystem,” which gathers varied interdisciplinary insights from scholars and practitioners in the fields of medicine, economics, engineering, education and compliance; and III) “Challenges of Personalized Medicine for Liability,” which focuses on the challenges that personalized data-driven medicine poses for traditional and novel liability regimes.

¹ <https://biorob-hub.eu/infrastructures/wp7/publications/>

² <https://www.sobigdata.it/>

The editorial team of the collected volume demonstrated exceptional commitment and coordination throughout the entire process. From the initial definition of the book's scope and objectives, they proactively built a multidisciplinary network of experts (the authors are members of the LaPoH, its Advisory Board and its network), established a clear timeline, and successfully drafted a compelling proposal for Springer. Their efforts extended to coordinating the authors' contributions, organizing a dedicated conference to discuss early chapter drafts (see below), and conducting two rounds of in-depth reviews to ensure alignment with the BRIEF objectives. In parallel, they managed complex interactions with the publisher and responded to its evolving requirements, while also liaising with the university's administration to facilitate the process. This rigorous and collaborative editorial approach was instrumental in producing a coherent and impactful volume that reflects both academic excellence and strategic relevance for research and innovation.

Beside the ten contributions that are included within the chapters of this book, three more contributions about product liability, transparency and fairness are in press.

2.3. Articles in conference proceedings

Meeting the goal of publishing 9 articles in national and international conference proceedings was the most challenging one for two reasons: first, unlike engineering and computer science research articles, legal scholarly contributions are published in journals rather than being presented at conferences; second, due to the financial nature of the PNRR project for developing infrastructures, no budget has been foreseen to cover for the trips that participating to such conferences entails. Nevertheless, the goal has been met with 9 publications and 2 in press conference papers.

In October 2024, WP7 proactively brought together the authors of the book chapters for a dedicated conference at the Sant'Anna School of Advanced Studies (see Section 3), fostering early-stage exchange and interdisciplinary dialogue. This collaborative event not only enriched the development of each contribution but also laid the groundwork for the collective volume *Enabling and Safeguarding Personalized Medicine*, which reflects the depth and diversity of insights shared during the conference. Four chapters, shaped through this dynamic academic setting, also carry the added value of having been presented and discussed as conference papers. Hence they are listed here.

In addition, the LaPoH members published in top-ranked interdisciplinary conferences that bring together legal and technical expertise, such as the ACM Conference on Fairness, Accountability, and Transparency, and the Privacy Symposium.

2.4. Policy briefs

WP7 foresaw the publication of 24 policy briefs that summarize key aspects on relevant national and international legislation (or legislative proposals) distributed across the three years of the project. The audience is composed of engineers, developers, biologists and other researchers with a non-legal background: this is why they only focus on relevant aspects for research and adopt an accessible language for lay people.

The first 8 policy briefs have been written by members of the LaPoH and have been presented at the 2023's awareness panel (see below). Another set of 8 policy briefs were presented at the

2024's awareness panel, while the final 8 policy briefs were mentioned during the Webinar series on Law & Tech described below in Section 3.3.

They cover key aspects of the legal framework analyzed in the reports dedicated to the cross-field regulatory analysis (i.e., D7.3, D7.4 and D7.5), namely the General Data Protection Regulation, the Medical Directive Regulation and the Italian decrees that implement it in Italy, the Clinical Trials Regulation, the AI Act and its Italian Implementation, the Machinery Regulation, the Data Act, the Data Governance Act, the Open Data Directive, the European Health Data Space, the Cyber Resilience Act and the NIS2 Directive. Other policy briefs focus on transversal topics that have utmost importance for research activities: the principle of accountability, data portability, the secondary use of health data, pseudonymization and data altruism.

Table 1. List of policy briefs published yearly

<i>Published in 2023</i>	<i>Published in 2024</i>	<i>Published in 2025</i>
1. General Data Protection Regulation 2. The principle of accountability 3. The right to data portability 4. Secondary use of health data 5. Critical Trials Regulation 6. Medical Devices Regulation 7. Italian implementations of the Critical Trials Regulation and Medical Devices Regulation – decrees of 20.03.23 8. Italian implementations of the Critical Trials Regulation and Medical Devices Regulation – decrees of 12.04.23	9. MDR – Custom-made devices 10. MDCG – When is software a medical device? 11. AI Act overview 12. AI Act – Transparency 13. AI Act – High risk AI systems 14. AI Act – Data Governance 15. AI Act – AI literacy 16. Machinery Regulation 4bis. Update on Secondary use of health data	17. Legge 132/2025 sull'intelligenza artificiale 18. Data altruism 19. Open Data Directive 20. European Health Data Space 21. Cyber Resilience Act 22. NIS2 23. Data Act 24. Pseudonymization

They are also being disseminated via the website of the LIDER Lab³ as blogposts and have been made available to the other members of BRIEF on the project's shared folder on Microsoft Teams. Lastly, like all the other publications, they were uploaded onto the BRIEF project's website as soon as it was published,⁴ as well as on Zenodo.⁵

³ <https://www.lider-lab.it/news/>

⁴ <https://biorob-hub.eu/infrastructures/wp7/awareness-development-and-oa-dissemination/>

⁵ <https://zenodo.org/communities/brief/records>

3. DISSEMINATION ACTIVITIES

The dissemination plan has foreseen a series of activities that have the goal of increasing the awareness and knowledge of the members of the BRIEF consortium on key regulatory aspects analyzed in WP7, as well as the wider national and international research and innovation community that revolves around the research groups involved in the project. WP7 exceeded the initially set goals for dissemination activities, as detailed below, by organizing and contributing to a significantly higher number of events than anticipated, demonstrating strong engagement, strategic outreach, and added value beyond the expected KPIs. The flyers of the events can be found in Appendix II.

It is also noteworthy to underline that the regular meetings with the Advisory Board of the LaPoH provided great benefit to the research tasks and the dissemination activities. The members of the Advisory Board were proactively included in the conferences and awareness panels organized by WP7, as well as in the drafting of the book, as detailed below. They also contributed to strengthening the visibility of the project's results by leveraging their networks.

3.1. Awareness panels

The plan set out the organization of 3 awareness panels, but 5 were organized. The first awareness panel ("Tecnologie BioRobotiche e abilitanti: il quadro giuridico di riferimento. Scenari operativi") was organized on the 20th of July 2023 in hybrid form and focused on the dissemination of the results of the first iteration of the cross-field regulatory analysis that was included in "D7.3 Cross-field Regulatory Analysis", as well as on the presentation of the first batch of policy briefs to the members of the consortium as well as to the wider public. An online awareness panel on the topic of the reuse of data and data anonymization was organized on the 13th of November 2023 ("Legality attentive personal data secondary uses in the digital and post-quantum cryptography") jointly with the PQ-REACT⁶ and LeADS research projects.⁷ On the 15th of January 2024, a joint awareness panel was co-organized with LeADS on the topic of "Data Ethics and Governance: Unravelling the Complexities of Privacy, Fairness, and Access in the Digital Age".

The fourth awareness panel was held on the 5th of March 2024 and included presentations on key challenges of biorobotics research. Alongside other research results, the panel presented the policy recommendations and the best practices that were included in the first iteration of "D7.6 Report on Policy Design and Advice". Moreover, both the members of the other BRIEF's WPs and the members of the LaPoH's Advisory Board were invited to present their research activities, the related challenges and their findings with the goal of engaging the legal and engineering communities in an interdisciplinary dialogue to address emerging research and innovation questions of BRIEF's research fields. On the 20th of May 2024 a fifth awareness panel was organized to present the results included in "D7.4 Cross-field Regulatory Analysis" under the title "BioRobotic and allied technologies: the legal framework. Operational scenarios II".

⁶ "Post Quantum Cryptography Framework for Energy Aware Contexts" is a project funded by European Union's Horizon Europe research and innovation programme under grant agreement N° 101119547. Website: <https://pqreact.eu/>

⁷ "Legality Attentive Data Scientists" (LeADS) is a project funded by European Union's Horizon Europe research and innovation programme under grant agreement N° 956562. Website: <https://www.legalityattentivedatascientists.eu/>

3.2. Workshops

A series of workshops were organized, engaging the technologists of the other WPs, some members of the LaPoH and some members of the bioengineering research groups. A first meeting was held on the 21st of November 2023 in Pontedera to start mapping the main needs in terms of legal-ethical support to the bioengineering research activities and complement the results obtained in the survey on the stakeholders' needs (see "D7.2: Engagement Strategy").

Throughout 2024 and 2025, a series of hands-on workshops were conducted with bioengineering laboratories, centered on the practical application of the AI Act's definition of AI systems and the Medical Device Regulation (MDR) as they pertain to real-world use cases. While data management remained a relevant topic (as planned in an earlier version of this report), particularly in relation to high-risk system requirements under the AI Act, the workshops extended well beyond it, offering a comprehensive exploration of the broader compliance framework. This approach was essential given the regulatory interplay between the AI Act and the MDR in contexts where AI is embedded in or constitutes a medical device. In the absence of established literature or guidance on these emerging legal intersections, the workshops provided a critical space for testing the law against concrete scenarios. They enabled LaPoH members to validate the knowledge generated in WP7 and offered bioengineers actionable insights for planning their design and development processes in alignment with evolving regulatory expectations. These sessions successfully led to joint publications with the engineering teams, demonstrating the practical value of interdisciplinary engagement (see in particular conference papers no. 3 and no. 10 in Appendix I).

A similar focus on interdisciplinary research between technology designers and legal scholars was at the center of the workshop on "Fair patterns for online interfaces", funded by the Netherlands' funding agency and held in January 2024 at the Lorentz Center of Leiden University. BRIEF was a partner with other research institutions and research projects. The workshop brought together experts from law, human-computer interaction, economics, academia, industry, and enforcement agencies to discuss how the concept of fairness should be operationalized and implemented in digital technologies.

3.3. Other activities

In addition to the planned activities and the given KPIs, the technologists working on WP7 as well as other members of the LaPoH have also engaged in a series of supplementary activities where greater visibility was provided to the research findings of the project through further dissemination. Such events include conferences, webinars and academic lectures where the research findings were presented or discussed.

For example, the joint conference organized in Pisa on "BioRobotics Research and Innovation Engineering Facilities: Scenari di Ricerca e Innovazione" (5th March 2024) was deeply beneficial for aligning the strategic directions of the different work packages. WP7, in particular, needed a clear understanding of the activities carried out by the other WPs, especially regarding data types, collection methods, and system functionalities, to accurately frame its deliverables on the regulatory analysis (D7.4 and D7.5). This alignment was essential to ensure consistency across the project and to ground the legal analysis in the actual technical and research practices of the research labs. The event also served as a valuable occasion to discuss how to ensure continuity beyond the project's duration; several ideas emerged during these exchanges, which WP7 later elaborated and integrated into D7.8 Sustainability plan.

Equally crucial was the BRIEF conference held on 14 October 2024, titled “Enabling & Safeguarding Personalized Medicine,” which brought together members of LaPoH, the advisory board, and the broader BRIEF’s research network. The event created a unique space for interdisciplinary dialogue, allowing participants to present and discuss early drafts of research papers across law, engineering, medicine, and related fields. It enabled constructive feedback, idea exchange, and mutual understanding, further strengthening the collaborative foundation of the project and contributing to the refinement of its scientific outputs, which were published as chapters in the book presented earlier.

Co-organizing webinars or other initiatives with other projects (such as the workshops above) is a strategic way to spark new research ideas, identify synergies for future proposals, and reach broader audiences for more effective dissemination. These joint events foster interdisciplinary dialogue, strengthen networks, and promote resource sharing, while also enhancing visibility across academic, regulatory, and practitioners’ communities. They create valuable opportunities for capacity building and practical engagement, especially when addressing emerging topics with limited existing guidance. This is why at the end of the project, in September 2025, we organized weekly webinars titled “Seminari di Law&Tech. Sinergie tra progetti” together with the projects SoBigData.it and Fit4MedRob.

Of particular relevance is also the participation to the 2025’s European Commission’s consultation on “A European Strategy for AI in science – paving the way for a European AI research council”⁸ with the aim to inform policy development with evidence-based insights. We intended to contribute to shaping regulatory frameworks with grounded expertise, increase the visibility and relevance of the project’s outputs, and foster alignment between academic research and societal needs.

The list of such activities is available in Appendix III.

⁸ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14547-A-European-Strategy-for-AI-in-science-paving-the-way-for-a-European-AI-research-council_en

APPENDIX I: PUBLICATIONS

Journal articles

Published:

1. Carnat I, 'Ethics Lost in Translation: Trustworthy AI from Governance to Regulation – Opinio Juris in Comparatio' (2023) 4 Opinio Juris in Comparatione 1 <<https://www.opiniojurisincomparatione.org/articles/pre-print-4/>>
2. Casarosa F, 'The risk of unreliable standards: Cybersecurity and the Artificial Intelligence act' [2024] Internet Policy Review <<https://policyreview.info/articles/news/cybersecurity-and-artificial-intelligence-act/1742>>
3. Casarosa F and Gennari F, 'Data Sharing in the Internet of Medical Things: Between the Data Act and the EHDS' [2023] European Journal of Risk Regulation 1 <<https://doi.org/10.1017/err.2025.18>>
4. Doan X and others, 'Comparing Attitudes Toward Different Consent Mediums: Semistructured Qualitative Study' (2024) 11 JMIR Human Factors e53113 <<https://doi.org/10.2196/53113>>
5. Gennari F, 'A tale of two cities? Fennia v Philips and Article 7 of the Product Liability Directive Update. Journal of European Consumer and Market Law (2023) <<https://kluwerlawonline.com/journalarticle/Journal+of+European+Consumer+and+Market+Law/12.6/EuCML2023049>>
6. Gennari F, 'Mixed-Functions IoT Devices: A Regulatory and Liability Requirements' Maze. A First Overview' (2024) 15 European Journal of Risk Regulation 912 <<https://doi.org/10.1017/err.2024.68>>
7. Gennari F, 'O Complementarity, Where Art Thou? Wading through the Medical Device Regulation and the AI Act Compliance: The Case of Software as a Medical Device. A Primer' [2024] BioLaw Journal-Rivista di BioDiritto 411 <<https://doi.org/10.15168/2284-4503-3207>>
8. Gennari F and Casarosa F, 'La condivisione dei dati nei dispositivi medici connessi (IoMT): tra il Data Act e lo Spazio europeo sui dati sanitari' [2025] BioLaw Journal - Rivista di BioDiritto 667 <<https://doi.org/10.15168/2284-4503-3504>>
9. Rossi A and others, 'Who Is Vulnerable to Deceptive Design Patterns? A Transdisciplinary Perspective on the Multi-Dimensional Nature of Digital Vulnerability' (2024) 55 Computer Law & Security Review 106031 <<https://doi.org/10.1016/j.clsr.2024.106031>>
10. Santos C and Rossi A, 'The Emergence of Dark Patterns as a Legal Concept in Case Law' [2023] Internet Policy Review <<https://policyreview.info/articles/news/emergence-of-dark-patterns-as-a-legal-concept>>
11. Tartaglione E and others, 'Disentangling Private Classes through Regularization' (2023) 554 Neurocomputing 126612 <<https://doi.org/10.1016/j.neucom.2023.126612>>

In press:

12. Xu, M, Rossi, A, and Tamò-Larrieux, A, 'The Future of Personalized Privacy Assistants: Gathering of Expert Opinions' [in press] Digital Society

Book chapters

Published:

1. Aprile IG and others, 'Bridging the Gap: Overcoming the Barriers to Using Robotics in Rehabilitation' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_13> accessed 29 September 2025
2. Blatti A and Tramacere S, 'The Transparency and Liability Issues Associated with AI-Based Medical Systems' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_15> accessed 29 September 2025
3. Casarosa F, Gennari F and Rossi A, 'Introduction' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_1> accessed 29 September 2025
4. Emdin M and Passino C, 'Personalized Medicine: A Medical Perspective' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_7> accessed 29 September 2025
5. Gallese C, 'Redefining Anonymization: Legal Challenges and Emerging Threats in the Era of the European Health Data Space' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_5> accessed 29 September 2025
6. Pappalardo C, d'Ambrosio F and Calabrò GE, 'Navigating the Increasing Complexity of Health Technology Assessments in the Digital Era: How to Support Value-Based Personalized Healthcare?' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_8> accessed 29 September 2025
7. Parziale A, 'AI-Powered Medical Devices and the Development Risk Defense Under the Revised Product Liability Directive' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_14> accessed 29 September 2025
8. Paseri L, 'Defining Scientific Research Within the EU's Politics of Data: The Impact on Personalized Smart Medicine' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_2> accessed 29 September 2025
9. Spajić D, 'Data Altruism Consent: A Move Forward Towards the Creation of a European Health Data Space?' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_3> accessed 29 September 2025
10. Trieste L and Turchetti G, 'The Evaluative, Economic, and Organizational Dimensions of Personalized Medicine' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer

Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_9> accessed 29 September 2025

In press:

11. Gennari F, 'Medical Internet of Things for rehabilitation. At a crossroads between the new Product Liability Directive Update and the former AI Civil Liability Directive' in Silvia Martinelli, Pierluigi Perri and Cristina Poncibò (eds), *EU Product Liability: Platforms, Internet of Things and Artificial Intelligence* (Routledge)
12. Rossi A, 'A fair digital environment was not built in a day: on the reasons why bolstering autonomous decision-making must go beyond ui design recommendations' in Raphaël Gellert, Cristiana Teixeira Santos and Hanna Schraffenberger (eds), *Dark Patterns & Manipulative Design Conceptualising and Systematising a Key Contemporary Phenomenon from a Legal Perspective and Beyond* (Edward Elgar Publishing)
13. Rossi A, 'Fair Design in a fair digital environment' in Rossana Ducato, Alain Strowel and Enguerrand Marique (eds), *The Declaration on European Digital Rights and Principles for the Digital Decade. A commentary with a Legal Design Perspective*

Conference proceedings

Published:

1. Bongard-Blanchy K and others, 'Analysing the Influence of Loss-Gain Framing on Data Disclosure Behaviour: A Study on the Use Case of App Permission Requests', *Proceedings of the 2023 European Symposium on Usable Security* (ACM 2023)
2. Doan X, Doğan FS and Rossi A, 'Analysis of Transparency and User-Relevancy of DTC Company Policies' in Jaap-Henk Hoepman and others (eds), *Privacy Symposium 2024* (Springer Nature Switzerland 2025)
3. Fagioli I and others, 'The Role of Artificial Intelligence and Machine Learning in Personalizing the Control of Robotic Lower Limb Prostheses' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_12> accessed 29 September 2025
4. Kocyigit E, Rossi A and Lenzini G, 'A Systematic Approach for A Reliable Detection of Deceptive Design Patterns Through Measurable HCI Features', *Proceedings of the 2024 European Symposium on Usable Security* (Association for Computing Machinery 2024) <<https://dl.acm.org/doi/10.1145/3688459.3688475>> accessed 8 September 2025
5. Kocyigit E and others, 'DeceptiLens: An Approach Supporting Transparency in Deceptive Pattern Detection Based on a Multimodal Large Language Model', *Proceedings of the 2025 ACM Conference on Fairness, Accountability, and Transparency* (Association for Computing Machinery 2025) <<https://dl.acm.org/doi/10.1145/3715275.3732129>> accessed 8 September 2025
6. Gennari F, '(Product) Liability in the Medical Internet of Things. What Now?' in Federica Casarosa, Francesca Gennari and Arianna Rossi (eds), *Enabling and Safeguarding Personalized Medicine* (Springer Nature Switzerland 2025) <https://doi.org/10.1007/978-3-031-99709-9_16> accessed 29 September 2025
7. Grigolo S, Galluppi RB and Sirtori M, 'New Perspectives in Research and Development for Patients and Caregivers: The Challenges of Digital Health

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10. Rossi A and others, ‘The AI system definition under the AI Act, a new nomen rosae?’ in Davide dall'Anna, Gizem Gezici, Giulio Rossetti (eds), *HHAI-WS 2025: Workshops at the Fourth International Conference on Hybrid Human-Artificial Intelligence (HHAI), June 9–13, 2025, Pisa, Italy* (CEUR WS)
11. Rossi A and Bongard-Blanchy K ‘La manière dont les informations sont cadrées dans une interface influence-t-elle notre comportement ?’ in Arrah Marie Jo and Julien Rossi (eds), *Vous prendrez bien un cookie ? Produire du « consentement » en ligne* (Presse des Mines)

APPENDIX II: AWARENESS PANELS



CODICE PROGETTO

PNRR M4C2 BRIEF IR0000036 – CUP J13C22000400007

I BRIEF- Awareness Panel

Tecnologie BioRobotiche e abilitanti: il quadro giuridico di riferimento. Scenari operativi

Il seminario presenta i risultati preliminari relativi all'analisi giuridica condotta al fine di sviluppare buone prassi per raggiungere la conformità etico-giuridica in tutte le fasi di sviluppo di tecnologie BioRobotiche e abilitanti.

20 luglio ore 9.15, Aula 5 – Sede Centrale – Scuola Superiore Sant'Anna & [Online](#)

9.15 - 9.30 Saluti e introduzione

Prof.ssa Arianna Mencucci, Prorettrice Scuola Superiore Sant'Anna e coordinatrice del progetto BRIEF
Dr.ssa Selene Tognarelli, Project Manager progetto BRIEF, Scuola Superiore Sant'Anna

9.30 - 10.15 Il quadro normativo e gli scenari operativi

Dr.ssa Francesca Gennari, Tecnologa Privacy progetto BRIEF, Scuola Superiore Sant'Anna

10.15 - 10.30 Policy Briefs

Stefano Tramacere, Chiara D'Elia, Scuola Superiore Sant'Anna

10.30 - 10.45 Q&A

Moderà: *Dr.ssa Denise Amram, Scuola Superiore Sant'Anna*

BRIEF - Biorobotics Research and Innovation Engineering Facilities

Riferimenti Evento: segriderlab@santannapisa.it

Richiesto accreditamento per n. 2 crediti formativi presso il Consiglio dell'Ordine degli avvocati di Pisa

Nel caso di interesse, compilare per favore il form di iscrizione

https://docs.google.com/forms/d/e/1FAIpQLSfQRR47ITu2Hgbjly-WrTCeo3BJoW22ihslb5_NP7OS0FARdW/viewform?usp=sf_link



Figure 3. First awareness panel held on 20th July 2023



Legality attentive personal data secondary uses in the digital and post-quantum cryptography

PQ-REACT, BRIEF and LeADS joint Webinar
13th of November 2023
Time 12.00 – 13.00 CEST

12.00 – 12.15 Basics of personal data protection, *Prof. Maria Gagliardi, Sant'Anna School of Advanced Studies of Pisa*
12.15 – 12.30 The decomplex notions of personal data and anonymity, *Prof. Gabriele Lenzini, University of Luxembourg*
12.30 – 12.45 Secondary uses conundrums, *Prof. Giovanni Comandé, Sant'Anna School of Advanced Studies of Pisa*
12.45 – 13.00 Q & A

Join us on Webex:

<https://santannapisa.webex.com/santannapisa-en/j.php?MTID=m11af0e22b44d16e07abea5577b017ce3>

Password: EEqPQVWe332 (normally not requested)



Contacts:
Segreteria LiderLab
segreteria@sanannapisa.it
The webinar will be recorded



Figure 4. Second awareness panel held on 13th November 2023



The LeADS project has received funding from the European Union's Horizon 2020 Innovative Training Networks under Grant Agreement No. 956562

Data Ethics and Governance: Unravelling the Complexities of Privacy, Fairness, and Access in the Digital Age

15th of January 2024
Time 14:00 – 18:00 CET

Location: U-Residence ([Google Maps](#))
Blvd General Jacques 271, 1050 Brussels
For the online participation, join us on Webex
No registration required



14:00 – 14:05 Welcome and introductory remarks
Prof. Dimosthenis Kyriazis, Dept. of Digital Systems, University of Piraeus Research Center

Panel 1: Challenges and Opportunities in Fair Machine Learning, Data Access, and Governance

14:05 – 14:15 Introduction
Chair: Prof. Giovanni Comandè, Scuola Superiore Sant'Anna

14:15 – 14:35 The Flawed Foundations of Fair Machine Learning
Robert Poe (Scuola Superiore Sant'Anna) and Soumia El Mestari (University of Luxembourg)

14:35 – 14:55 Measuring data access and re-use in the European legal framework, from GDPR to Data Act
Tommasso Crepax, Mitisha Gaur (Scuola Superiore Sant'Anna) and Barbara Lazarotto (Vrije Universiteit Brussel)

14:55 – 15:15 Data Collaborative with the use of Decentralized Learning
Maciej Zuziak (National Research Council), Onntje Hinrichs (Vrije Universiteit Brussel), and Aizhan Abdrassulova (Jagiellonian University)

15:15 – 15:35 Discussion
Panelists: Dr. Laura Drechsler (KU Leuven), Dr. Katarzyna Poludniak (Jagiellonian University), Prof. Gabriele Lenzini (University of Luxembourg)

15:35 – 15:50 Q&A

15:50 – 16:10 Coffee break

Panel 2: Data Privacy, Minimization, and Governance in Personal (and Sensitive) Data

16:10 – 16:20 Introduction
Chair: Prof. Gianclaudio Malgieri, University of Leiden

16:20 – 16:40 Contribution to data minimisation for personal data and trade secrets
Qifan Yang (Scuola Superiore Sant'Anna) and Cristian Lepore (University of Toulouse III)

16:40 – 17:00 Transparency and relevancy of direct-to-consumer genetic testing privacy & consent policies in EU
Xengie Doan (University of Luxembourg) and Fatma Sumeyra Dogan (Jagiellonian University)

17:00 – 17:20 From Data Governance by Design to Data Governance as a Service
Armend Duzha, Christos Magkos (University of Piraeus Research Center), and Louis Sahi (University of Toulouse III)

17:20 – 17:45 Discussion
Panelists: Dr. Elwira Macierzyńska-Franaszczyk (Jagiellonian University), Dr. Arianna Rossi (Scuola Superiore Sant'Anna), Dr. Afonso Ferreira (Centre National de la Recherche Scientifique), Prof. Michail Philipakis (University of Piraeus Research Center)

17:45 – 18:00 Q&A

Contact:
Emmanouil (Manolis) Alexakis
Senior Researcher
The Data & Cloud (DaC) Research Group
Network Systems & Services Laboratory
University of Piraeus Research Center
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In collaboration with



Biorobotics Research & Innovation Engineering Facilities

Project funded under GA No. IR0000036* – CUP J13C22000400007

Figure 5. Third awareness panel organized jointly with LeADS on 15th January 2024



PNRR M4C2 BRIEF IR0000036 – CUP
J13C22000400007

Biorobotics Research and Innovation Engineering Facilities: Scenari di ricerca e d'innovazione

5 marzo 2024
9.00-14.15 CET

Aula Magna Storica, Sant'Anna School of Advanced Studies
Online tramite Microsoft Teams: <http://tinyurl.com/yc3ea5b5>



9:00 - 9:15	Saluti Istituzionali
9:15 - 9:30	Introduzione - <i>Prof.ssa Arianna Menciassi, Prorettrice SSSA</i>
9:30 - 9:45	Coordination, Access and Visiting Program and Training – <i>Prof.ssa Arianna Menciassi</i>
9:45 - 10:00	BioRobotics Distributed Facilities - <i>Prof. Leonardo Ricotti</i>
10:00 - 10:15	BioRobotics Science to Engineering Translation – <i>Prof. Calogero Maria Oddo</i>
10:15 - 10:30	BioRobotics Platforms - <i>Prof. Nicola Vitiello</i>
10:30 - 11:00	<i>Pausa caffè</i>
11:00 - 11:15	BioRobotics & Health - <i>Prof. Silvestro Micera</i>
11:15 - 11:30	BioRobotics & Sustainability - <i>Prof. Francesco Greco</i>
11:30 - 11:45	Legality Attentive BioRobotics Science and Policy-making – <i>Prof. Giovanni Comandé e Prof.ssa Caterina Sganga</i>
11:45 - 13:15	Panel di discussione con i membri dell'Advisory Board del Law and Policy Hub - <i>Irene Giovanna Aprile, Annalisa Calabrò, Simona Crea, Sabrina Grigolo, Gianclaudio Malgieri, Andrea Parziale</i>
13:15 - 14:15	<i>Light lunch</i>

Iscrizione gratuita ma obbligatoria entro il 25 febbraio 2024: <https://forms.office.com/e/fdcuzEFfMe>

Per maggiori informazioni: segreteria@ santannapisa.it

Figure 6. Fourth awareness panel organized with the whole BRIEF consortium on 5th March 2024

CODICE PROGETTO

PNRR M4C2 BRIEF IR0000036 – CUP J13C22000400007

II BRIEF RI Awareness Panel

BioRobotic and allied technologies: the legal framework. Operational scenarios II

The panel will present the results of the legal analysis aimed at establishing best practices that enable the ethical-legal compliance by design and by default during the entire lifecycle of the development of biorobotic and allied technologies.

20th May at 12 h, Aula 5 – Sede Centrale – Scuola Superiore Sant'Anna & [Online](#)

Greetings and introduction

Dr. Selene Tognarelli, Project manager BRIEF RI, Scuola Superiore Sant'Anna

Roundtable on legal issues of BioRobotics and Allied Technologies: Case scenarios on IP-related aspects, the AI Act, and software in emerging technologies

Dr. Pelin Turan, Dr. Arianna Rossi, Dr. Francesca Gennari, and Andrea Blatti, Scuola Superiore Sant'Anna

Q&A

Conclusions and next cross-fields related challenges for BRIEF RI

Dr. Denise Amram, Scuola Superiore Sant'Anna



BRIEF - Biorobotics Research and Innovation
Engineering Facilities

Contact: segrliderlab@santannapisa.it
Richiesto accreditamento presso Ordine avvocati di Pisa

Figure 7. Fifth awareness panel organized on 20th May 2024

APPENDIX III: DISSEMINATION ACTIVITIES

- 28 April 2023: F. Gennari “Standards and Liability: what about mixed functions IoT e-health devices?” presentation at “Colloquium on cybersecurity in the health sector. Emerging challenges and priorities surrounding the digital transformation of health and care” (EUI)
- 15 July 2023: F. Gennari “Internet of Things (IoT) Responsabilità tra Policy e Diritto”, academic lecture at Master SSOMPL (University of Pisa)
- 18 September 2023: A. Rossi “Roundtable on Legal Design” at State of Privacy 2023 organized by Garante della Protezione dei Dati Personali in Rome
- 25 September 2023: A. Rossi “Dark pattern & privacy: dal design manipolatorio a un design rispettoso dei diritti”, interview at Privacy Week 2023
- 12 October 2023: F. Gennari “Cyber-Sécurité et Protection des Données à caractère personnel cours de formation pour magistrats du Niger, Tchad, Cameroun, Mali », academic lecture for judges from Niger, Tchad, Cameroun and Mali organized by Scuola Superiore Sant’Anna and Ministry of Foreign Affairs and International Cooperation
- 22 October 2023: F. Gennari “Mastering Legal and Ethical compliance for Biorobotic and allied technologies”, presentation at I-Rim (Makers fair) in Rome
- 14 November 2023: A. Rossi “Getting out of the ethical-legal maze of data scraping: how might we ease researchers’ compliance tasks?”, presentation at workshop “techno-legal challenges of data scraping” (University of Turin)
- 17 November 2023: F. Gennari “IoT and liability”, academic lecture at Master Cybersecurity (University of Pisa)
- 6 December 2023: A. Rossi “The role of legal design for a user-centered data experience”, presentation at webinar “Raising Awareness on Data Altruism between Gaps and Enablers” (Sant’Anna School of Advanced Studies)
- 28 January - 2 February 2024: “Fair patterns for online interfaces”, funded by the Netherlands’ funding agency and held at the Lorentz Center of Leiden University, A. Rossi was one of the main organizers
- 25th April 2024: A. Rossi invited talk at “Fair design in technologies” Legal Design Roundtable 2024, Bruxelles
- 3rd May 2024: F. Gennari presentation at the international digital workshop “Product Liability: Platforms, Internet of Things and Artificial Intelligence”, Turin
- 10th May 2024: F. Gennari presentation at the conference “Artificial Intelligence for Oncology”, Milan
- 19th June 2024, A. Rossi presentation at the eLaw Conference, Leiden
- 14th October 2024: BRIEF training conference “Enabling & safeguarding personalized medicine” at Sant’Anna School of Advanced Studies
- 24-25 October 2024: A. Rossi participation to European Privacy Law Scholars Conference, Amsterdam
- 23rd May 2025: A. Rossi participation in panel at the CPDP.ai conference, Brussels
- 10 June 2025: A. Rossi participation in event organized by the Garante Privacy to present the White paper on legal design, Rome
- 19-26 June 2025: A. Rossi invited expert at Dagstuhl Seminar 25261 “Future of Human-Centered Privacy”
- 16 and 23 September 2025: BRIEF webinar (co-organized with other projects) “Seminari Law&Tech. Sinergie tra progetti”, Arianna Rossi and Francesca Gennari, 2 webinar online

Slides, flyers and other materials related to these activities are available on demand.

