Marie Skłodowska-Curie POSTDOCTORAL Fellowships 2024

Expression of Interest for hosting Marie Curie Fellows

HOST INSTITUTION

NOVA School of Law

RESEARCH UNIT AND URL

CEDIS - Research Centre on Law and Society

CEDIS Research Centre - NOVA School of Law (unl.pt)

SUPERVISOR (NAME AND E-MAIL)

Vera Lúcia Raposo, vera.lucia.raposo@novalaw.unl.pt

SHORT CV OF THE SUPERVISOR

Vera Lúcia Raposo is an Assistant Professor of Law and Technology and the Vice-Director of the Nova School of Law. She graduated in Law from the University of Coimbra, where she also completed her postgraduate studies in medical law, and earned both a master's and a doctorate in legal and political sciences. Vera has taught at prestigious institutions such as the University of Macau in China and the University of Coimbra in Portugal. She specialized in health law and privacy while working as a lawyer at the Vieira de Almeida e Associados Law Firm, in Lisbon.

Vera's research primarily focuses on digital law, including AI, data protection, the metaverse, digital governance, and digital ethics, as well as biomedical law covering topics such as medical liability, patient safety, genetic editing, and digital health. Her work is widely published in indexed journals.

Vera Lúcia Raposo is profoundly experienced in Medical Law, Ethics, and Digital Law, especially at the intersection of AI and Medicine. As a member of the European Association of Health Law and the Portuguese Governor of the World Association for Medical Law, she has significantly contributed to the field. At NOVA School of Law, she leads the AI branch in the Masters in Law & Tech program and explores legal and ethical challenges posed by AI in healthcare. Her leadership in AI-related courses and her innovative research at the Hastings Center highlight her role at the forefront of legal and ethical discussions in health, science, and technology.

5 relevant publications by the supervisor or project

- Vera Lúcia Raposo, 'Complementary and Alternative Medicine, Medical Liability and the Proper Standard of Care', *Complementary Therapies in Clinical Practice,* 35, 2019, pp. 183-188, 2019, at https://reader.elsevier.com/reader/sd/pii/S1744388118308235?token=C2D77BF5C9E4CE631 CB5BF878DF2AB57A7A06CE3CD6E08AD4048C15E1A13E94797F02E4EFAA14242A9748 D8565E6319C, DOI: 10.1016/j.ctcp.2019.02.009

- Vera Lúcia Raposo, "Defensive Medicine and the Imposition of a More Demanding Standard of Care", Journal of Legal Medicine, 39(4), 2019, pp. 401-416, Doi: 10.1080/01947648.2019.1677273

- Vera Lúcia Raposo, "Informed Consent in China and Macao", in Informed Consent and Health - A Global Analysis (Thierry Vansweevelt and Nicola Glover-Thomas eds.), pp. 144-162. Edward Arnold Publishers, 2019,https://doi.org/10.4337/9781788973427.00014

- Vera Lúcia Raposo and Roy Beran (eds.), Medical Liability in Asia and Australasia. Ius Gentium: Comparative Perspectives on Law and Justice, vol 94. Springer, Singapore: 2022, https://doi.org/10.1007/978-981-16-4855-7

- Vera Lúcia Raposo, 'Ex Machina: Preliminary Critical Assessment of the European Draft Act on Artificial Intelligence, International Journal of Law and Information Technology, 2022, eaac007, https://doi.org/10.1093/ijlit/eaac007

5 SELECTED PUBLICATIONS

Artificial intelligence (AI) has significant potential to enhance medicine by improving the efficiency and accuracy of diagnostic and therapeutic decisions and enriching the experiences of both healthcare providers and patients. For example, AI technologies have made strides in medical image analysis, handling vast amounts of data to reduce human error and accelerate the transition from diagnosis to treatment.

However, the introduction of AI into medicine also brings challenges, particularly regarding the Medical Standard of Care (MSC), traditionally defined as the level of care a reasonably skilled healthcare professional would provide under similar circumstances. This standard serves as a benchmark to determine if professional obligations to patients are met and forms the basis of medical malpractice claims. As AI technologies become more embedded in healthcare, the MSC must evolve to include these innovations while maintaining patient trust and safety.

The adaptation of the MSC in the context of AI is complicated due to potential algorithmic inaccuracies that could lead to patient harm and subsequent medical liability. Legal frameworks generally protect physicians as long as they adhere to the standard of care. Still, with the integration of AI, there is a concern that physicians might use AI solely as a confirmatory tool rather than as a means to enhance care, potentially compromising the full benefits of AI. Recent research has aimed to define the MSC within the AI paradigm more clearly, noting the challenges posed by the complexity and poor explainability of AI technologies. This ongoing research seeks to develop a practical framework for the MSC that accounts for the nuances of medical AI, focusing on aspects like informed patient consent, AI explainability, and the impact of AI on the doctor-patient relationship.

The research involves several key areas: reviewing current norms and technologies related to the MSC, analyzing legal cases of medical liability in Portugal, gathering perspectives from medical practitioners on the MSC in the AI context, and developing a normative framework for applying the MSC in AI-enhanced healthcare. This interdisciplinary approach aims to provide comprehensive guidance for medical practitioners using AI, ensuring safe, ethical, and legally sound practices that enhance patient care and trust.

PROJECT TITLE/KNOWLEDGE CENTER AND SHORT DESCRIPTION

Title/Name: A normative perspective on the medical standard of care and patient safety in Artificial Intelligence medicine

SCIENTIFIC AREA WHERE THE PROJECT FITS BEST*

SOC

*Scientific Area where the project fits best – Please select/indicate the scientific area according to the panel evaluation areas: Chemistry (CHE) · Social Sciences and Humanities (SOC) · Economic Sciences (ECO) · Information Science and Engineering (ENG) · Environment and Geosciences (ENV) · Life Sciences (LIF) · Mathematics (MAT) · Physics (PHY)