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UNIVERSITÀ DI MACERATA

Radboudumc



JustHealth: Building a Decolonized Ethics and Governance Framework for Just and Trustworthy AI in Healthcare

Fellowship Call for Application

DEADLINE: January 31st, 2026 – 17.00 CET

DC1: Decolonized values and principles for just and trustworthy AI in healthcare

DC2: Decolonized governance for just and trustworthy AI in healthcare

DC3: Co-creation strategies, methods and instruments for decolonized, just and trustworthy AI in healthcare

DC4: Co-creation skills for decolonized, just and trustworthy AI in healthcare

DC5: Development and validation of gait foundation models: use-cases in bias-free monitoring of pathological gait

DC6: Decolonized, just and trustworthy FMs for RHD screening and staging RHD

DC7: Clinically robust and just care pathway embedding FMs-based and wearable technology for decolonized and bias-free monitoring of FOG severity

DC8: Clinically robust and just care pathway embedding FMs and handheld echocardiography or PCG for decolonized and bias-free RHD screening and staging



**Funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Research Executive Agency. Neither the European Union nor the Research Executive Agency can be held responsible for them.

BACKGROUND OF THE JUSTHEALTH RESEARCH PROJECT

Eight research fellowships are offered within the framework of **JustHealth: Building a Decolonized Ethics and Governance Framework for Just and Trustworthy AI in Healthcare**, a project funded by the European Union's Horizon Europe funding programme, under the Marie Skłodowska-Curie Doctoral Network (GA n. 101227352).

JustHealth is an international, intersectoral and highly interdisciplinary project providing Marie Skłodowska-Curie PhD Fellowships to 8 Doctoral Candidates, with the potential to become the leaders of tomorrow in the booming domain of Artificial Intelligence (AI) applied to the Health sector.

JustHealth aims to develop, test, validate, and valorise a robust ethics and governance framework for AI in healthcare, grounded in decolonised values and principles and on a co-creation approach, with the ultimate goal of ensuring that AI systems (especially those based on Foundation Models – FMs) are not only trustworthy but also just (i.e. guaranteeing social justice for Global Health).

Specific research objectives guide the project:

1. Map and critically analyse interdisciplinary gaps (ethical, legal, technical, clinical) that hinder social justice in AI, identifying co-creation strategies and tools.
2. Develop an ethics and governance framework tailored to FMs in the healthcare sector, applied to two use cases involving vulnerable groups: monitoring freezing of gait (FOG) which affects older populations in Western countries and screening rheumatic heart disease (RHD) which affects younger populations in the Global South.
3. Validate and refine the framework and related outputs (e.g., assessment tools, care pathways, FM-based applications) within the context of 2 pilot actions to be conducted respectively in Belgium-Netherlands and in South Africa (one related to FOG, one related to RHD).
4. Promote the adoption of the framework via recommendations for policy- and decision-makers, insights for standardisation, and guidelines for its use in other health cases.

The following PhD students (also indicated as Doctoral Candidates - DCs) will collaborate within the JustHealth research program by focusing on the following aspects related to AI and FMs in healthcare: more specifically 1 PhD student will focus on the ethical aspects (DC1), 1 PhD student on the governance (law/policy) aspects (DC2); 2 PhD students on co-creation strategies and tools (DC3&DC4); 2 PhD students on the technical/engineering aspects (DC5&DC6); and 2 PhD students on the medical/clinical aspects (DC7&DC8).

DOCTORAL TRAINING AND MOBILITY

JustHealth is the **first doctoral program in Europe and beyond with the aim of ensuring that social justice is adequately considered in the design, development and deployment of AI in healthcare**.

Thanks to its genuinely transdisciplinary approach, Doctoral Candidates from different academic backgrounds will acquire hands-on experience in participatory research, by collaborating among themselves and with relevant stakeholders, taking into account needs and perspectives of both the Western countries and the Global South.

This highly ambitious and innovative doctoral program combines academic excellence with strong international attitude, inspired by an innovation-oriented mind-set. PhD students will develop a completely new profile, based on a strong interdisciplinary and intersectoral approach, integrating

ethical and legal perspectives, engineering and medical skills, creativity and entrepreneurial allure. *Mobility* plays a central role in the programme: PhD students will follow a secondment scheme in leading academic institutions as well as in non academic organisations. Mobility periods are foreseen in European countries, in South Africa and in the USA. Indicative planned secondments for each PhD position are illustrated in the attachment.

POST DESCRIPTION

Number of available positions: 8 positions (DC1, DC2, DC3, DC4, DC5, DC6, DC7, DC8) as listed in the attachment.

Title: Marie-Sklodowska-Curie Doctoral Fellow

Hiring institutions

DC1 and DC2 will be hired by the University of Macerata (Italy);
DC3 and DC4 will be hired by the Maastricht University (the Netherlands);
DC5 and DC6 will be hired by KU Leuven (Belgium);
DC7 will be hired by the Radboud University Medical Center (the Netherlands);
DC8 will be hired by University of Cape Town (South Africa).

PhD Enrollment:

DC1 and DC2 will be enrolled at the Doctoral School of the University of Macerata (Italy)
DC3 and DC4 will be enrolled at the Doctoral School of the Maastricht University (the Netherlands);
DC5 and DC6 will be enrolled at the Doctoral School of KU Leuven (Belgium);
DC7 will be enrolled at the Doctoral School of the Radboud University (the Netherlands);
DC8 will be enrolled both at the Doctoral School of KU Leuven (Belgium) and at the Doctoral School of the University of Cape Town (South Africa).

Tuition fees - where foreseen - will be charged to the JustHealth's budget.

DESCRIPTION OF HIRING INSTITUTIONS

University of Macerata

The **University of Macerata (UNIMC)**, founded in 1290, is the only university in Italy that focuses on Socio-economic Sciences and Humanities (SSH). The Department of Political Sciences, Communication and International Relations is an interdisciplinary environment with **key expertise in digitalisation processes and AI**. It is currently running more than 40 projects in different areas of AI, with a strong emphasis on AI for health and on the ethical and legal dimension of AI and its policy implications.

The University hosts the Jean Monnet Chair Ethics for inclusive digital Europe, is full member of the Jean Monnet Network ENDE - European Network on Digitalisation and E-Governance, and offers a post-graduate course on the ethics, law, and policy of AI, as well as several BA and MA courses on digital media and AI for the public and private sector. Moreover, it has founded the university spin-off GAIA, focused on AI ethics and governance, and **specialised in the ethical and legal assessment of AI systems**.

In 2014, UNIMC was awarded by the European Commission with the 'Excellence in Research Logo'.

It was one of the first institutions to get this recognition, which was confirmed in 2021.

Maastricht University

Founded in 1976, Maastricht University (UM) is the most international university in the Netherlands and a pioneer in innovative education and interdisciplinary research. With over 23,000 students and nearly 5,000 staff, UM is known for its Problem-Based Learning (PBL) approach, international classroom, and a strong focus on societal relevance. The university ranks among the top young universities globally and holds leading positions in rankings for education, sustainability, and open science.

UM is a founding partner of the Young European Research Universities Network (YERUN) and participates actively in Horizon Europe, including hosting ERC grantees and coordinating Marie Skłodowska-Curie Actions. It houses the Brightlands ecosystem, a network of science and innovation campuses, and is home to several interdisciplinary research institutes and labs such as the Maastricht Center for Robots and the Digital Experience Lab (DEXLab). Research at UM emphasizes responsible innovation, digital transformation, and public value creation, with strengths in health, sustainability, and AI in society. UM is deeply engaged in doctoral training through its six faculties and multiple graduate schools, offering an open, international environment for early-career researchers. Its School of Business and Economics (SBE) holds the prestigious Triple Crown accreditation, having received all three major international business school accreditations: AACSB (USA), AMBA (UK), and EQUIS (EU), places SBE among the top ~1 % of business schools worldwide.

KU Leuven

Founded in 1425, KU Leuven is Belgium's largest university and a founding member of LERU; as of July 2025, it hosts 64,151 students (7,201 of them doctoral), employs 22,534 staff including 8,157 researchers, and draws 24 % of its student body from 154 nationalities. Its research engine produces more than 10,600 peer-reviewed publications a year, is powered by € 749 million in annual expenditure (81 % from external sources), and is underpinned by 168 ERC grants, making KU Leuven the top-ranked higher-education participant in both Horizon Europe and Marie Skłodowska-Curie Actions. The university is currently ranked #43 worldwide by Times Higher Education (2025) and #60 by QS (2026), and it led Reuters' "Europe's Most Innovative Universities" list for four consecutive editions (2016-2019). Knowledge valorisation is channelled through KU Leuven Research & Development (LRD), established in 1972, which has launched 186 spin-off companies and manages extensive IP and industrial-collaboration portfolios. Together, these figures confirm KU Leuven's dual identity as a 600-year-old institution and a modern global hub for frontier research, innovation, and international talent. [KU Leuven Research/Onderzoek](https://www.kuleuven.be/research/onderzoek) [reuters.com](https://www.reuters.com)

Radboud University Medical Center

Radboud University Medical Center, situated in Nijmegen, is a leading institution dedicated to patient care, research, and education. Guided by the mission to have a significant impact on health, the center pioneers the future of healthcare with a focus on innovation, collaboration, and personalized patient-centered approaches. Specializing in prevention, sustainable healthcare, artificial intelligence, molecular disease

mechanisms, and training the professionals of tomorrow, Radboudumc strives to excel nationally and internationally. With a commitment to excellence in care, research, and education, the center aims to shape a sustainable, innovative, and affordable healthcare system for generations to come, placing the patient at the forefront of their endeavors.

University of Cape Town

Founded in 1829 as the South African College, the University of Cape Town (UCT) is the oldest university in South Africa and today serves roughly 29,000 students across six faculties, 13 % international, drawn from over 100 countries, supported by 4,984 staff (1,277 academic). [UCT NewsTimes Higher Education \(THE\) UCT News](#) UCT's research engine features 452 NRF-rated scholars (including 32 A-rated world leaders) and 38 SARChI research chairs; in 2022 its researchers signed 1,793 contracts worth R1.4 billion, managed 164 active inventions with 46 patent filings and 35 grants, and held >R173 million equity in spin-off companies, a portfolio that grew by six new spin-offs in 2024. [UCT News](#) The university is ranked #180 globally by Times Higher Education 2025 and #150 by QS 2026, consolidating its standing as Africa's top institution. [Times Higher Education \(THE\)Top Universities UCT News](#) Membership in networks such as ARUA, IARU and WUN underlines UCT's international reach, while its Research Contracts & Innovation office channels internal seed funds and industry partnerships to translate discovery into social and economic impact. [UCT News](#)

CAREER DEVELOPMENT PROSPECTS

The selected Doctoral Candidates will gain a comprehensive set of research skills, linked to the current and booming global AI labour market in the health sector. They will be also provided with transversal skills (Open Science, IPRs, grant application, etc.) and with the capacity to conduct their specific research according to a **challenge-oriented and co-creation approach**.

Exposure to top institutions based in the United States and South Africa will further enhance Doctoral Candidates' profile by enriching them with a global perspective that is fundamental for AI in the health sector. This combination of skills will increase their attractiveness for both academic and business sector.

NON-DISCRIMINATION POLICIES

Maastricht University

Maastricht University (UM) is committed to creating an inclusive academic community where all individuals are respected, supported, and valued, regardless of gender, age, ethnic or cultural background, sexual orientation, religion, disability, or socio-economic status. Diversity and inclusivity are key pillars of UM's strategy and are actively promoted across research, education, and the workplace. A dedicated Confidential Adviser network and Ombudsperson system are in place to support staff and PhD candidates facing psychosocial or workplace-related issues. To promote work-life balance and well-being, UM offers flexible working arrangements, hybrid work policies, and access to childcare facilities in cooperation with local providers. Employees and PhD candidates with disabilities are supported through tailored solutions, including workplace adaptations, assistive technologies, and mobility services. UM is an HR Excellence in Research Award holder and adheres to the principles of the European Charter for Researchers, ensuring fair and transparent conditions for researchers at all career stages.

University of Macerata

University of Macerata pursues an equal opportunities and diversity policy as well. Among facilities, a kindergarten is available for university's employees. Specific facilities and services are also dedicated to employees with disabilities (transportation services, specific technologies for studying).

KU Leuven

KU Leuven fosters an open, respectful workplace where **all talents can flourish irrespective of gender, age, cultural background, nationality or disability** and where personal development is encouraged through flexible career paths and extensive training options. To safeguard **work-life balance**, the university runs its own nurseries, offers home-care for sick children and organises affordable childcare during Belgian school holidays. At the same time, employee **well-being** is protected by a layered psychosocial support system that includes confidential advisers in the “Unit of Confidence,” internal and external Prevention Advisers on Psychosocial Aspects (in partnership with the occupational-health service IDEWE), and clear informal-to-formal pathways for anyone seeking help, ensuring timely, professional assistance for psychological or physical concerns. [KU Leuven](#) [KU Leuven](#) [Algemene en ondersteunende diensten](#) [Algemene en ondersteunende diensten](#)

Radboud University Medical Center

Radboudumc recognizes the added value of diversity, representing the widest range of backgrounds, perspectives, and experiences. Diversity directly improves the quality and effectiveness of scientific teams and is an essential ingredient for excellence. Diversity is therefore implicit in our recruitment policy. Our Gender Equality and Diversity Plan focusses on the following themes:

1. Gender balance in senior positions, equal pay and career development
2. Diversity and gender equality in recruitment and selection
3. Integration of the sex and gender dimension in the content of our research and teaching
4. Measures to guarantee social safety and vital employees

University of Cape Town

The University of Cape Town commits to an anti-racist, non-sexist and disability-inclusive workforce through its Employment Equity Policy, which sets clear transformation targets and obliges every faculty or service department to develop and monitor its own equity plan so that “all suitably qualified candidates can compete equally” and staff demographics progressively mirror South Africa’s diversity while upholding personal dignity and academic excellence. Beyond policy, UCT supports work–life balance by running the on-campus Educare Centre, a home-from-home nursery that serves the children of staff and students and reflects the university’s multicultural character, while additional holiday-care options are promoted in campus communications. Employee well-being is safeguarded by the confidential Employee Health and Wellness Programme (EHWP), a no-cost counselling and work-life resource that staff are actively encouraged to use, especially for issues such as stress, bullying or trauma. Together, these pillars, equity-driven hiring, practical childcare, and accessible psychosocial support, create a workplace culture grounded in openness, inclusion and respect. [UCT News](#) [UCT News](#)

ELIGIBILITY CRITERIA

Degree: Master’s degree or equivalent providing access to Ph.D programmes. See attachment for required degree for each position.

Language: English proficiency must be attested either through a previous English language diploma, or an internationally recognised proficiency test (at least C1 level of the Common European Framework of Reference for Languages i.e. IELTS, IBT, TOEFL or Cambridge).

Career: At the date of recruitment (see details in each position's description), selected researchers should be doctoral candidate (i.e. not already in possession of a doctoral degree).

Mobility: At the date of recruitment, the researcher must not have resided, or carried out his/her main activity (work, studies, etc.) in the country of the hiring institution for more than 12 months in the 3 years immediately before the recruitment date, unless as part of a compulsory national service or a procedure for obtaining refugee status under the Geneva Convention (1951 Refugee Convention and the 1967 Protocol).

Application: Complete and timely submission exclusively via the on line application system indicated for each DC position. Documents submitted must be in English. If supporting documents (e.g. letters of academic references and scan of degree qualification) are not in English, they must be submitted together with a certified translation in English).

Please note that, in addition to the above-mentioned eligibility criteria further essential or desirable requirements are detailed for each PhD position (see attachment).

HOW TO APPLY

Applications must be sent exclusively in English and through the online application system indicated for each DC position. Applications sent through other means or in other languages (other than English) will not be evaluated.

Candidates are required to submit the following documents:

1. a complete CV in Europass Format in English that must highlight activities and place where the activities have been carried out in order to give evidence of fulfilling the mobility eligibility criterion (see above). Use the template available at <https://europass.cedefop.europa.eu/it/documents/curriculum-vitae/templates-instructions>
2. a complete academic CV in English with references to past research and training experiences;
3. a motivation letter, in English, highlighting the consistency between the candidate's profile and the chosen DC position for which he/she is applying;
4. at least 2 letters of Academic reference, in English or in certified translation;
5. scan of the degree qualification, with certified translation in English (if the degree qualification is not in English);
6. proof of language proficiency;
7. scanned copy of valid identification document (identity card or passport);
8. Declaration of Honour according to the template available on the website <https://justhealth-project.eu/> for download;
9. (OPTIONAL) Any further and relevant supporting documents (e.g., research publications, document attesting proficiency in another language).

Candidates possessing the relevant requirements may opt for applying for one or more positions. If candidates apply for more than one position they are required to submit one application for each position.

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the criterion “Qualifications and previous experience” and related sub-criteria, as specified under the description of each position.

Candidates will be ranked for each foreseen position they have applied to, based on the scores assigned. The threshold to be shortlisted is 30. If candidates have been awarded with the same score, priority will be based on scores assigned for the sub criterion “current knowledge and expertise”.

For each position, up to 10 candidates awarded with the highest scores in the short list will be invited for an interview. The interview may be conducted also using a videoconference system.

During the interview the candidates will be evaluated according to the criterion “Communication and personal skills” and related sub-criteria, as specified under the description of each position.

For each position the final ranking list will be obtained by adding the score obtained by the shortlisted candidate according to the criterion “Qualifications and previous experience” to the score obtained after the interview assessment according to the criterion “Communication and personal skills”. When scores are equal, priority will be based on the subcriterion “Ability to design and conduct original research in the subject area of the individual research project”.

In case a candidate does not reach a minimum score of 45 points out of 70 points on the criterion “Communication and personal skills”, the selection panel has the right to not proceed with recruitment.

TIMING OF SELECTION PHASE

- **By 31 January 2026** Candidates must apply by submitting required documents through the online application systems indicated under the description of each position
- **By 10 February 2026** Shortlisted candidates will be invited to have an interview (also via videoconference) with the selection panel. Interviews will be held from March 9 to March 27. Candidates may be required to have a further interview to be held face to face (in this case costs of travel and accommodation will be reimbursed).
- **By Mid-April 2026** Shortlisted candidates will be informed about the final decision.
- **Within 10 days from the date of notification** Selected candidates will have to provide written confirmation of their acceptance of the offered position, otherwise they will lose the position and the following candidate in the ranking list will be recruited.
- **Within August 2026** Selected candidates will be recruited by hiring institutions.
- **Within September 2026** Employment contracts will start.

The above timing may be subject to slight changes that will be – in case - promptly notified.

CONTACT: Enquiries on general aspects can be sent to info@justhealth-project.eu. Enquiries related to each specific position can be sent to the relevant project supervisor(s) via email.

ATTACHMENT - DESCRIPTION OF EACH DC POSITION

DC1: Decolonized values and principles for just and trustworthy AI in healthcare

DC2: Decolonized governance for just and trustworthy AI in healthcare

DC3: Co-creation strategies, methods and instruments for decolonized, just and trustworthy AI in healthcare

DC4: Co-creation skills for decolonized, just and trustworthy AI in healthcare

DC5: Development and validation of gait foundation models: use-cases in bias-free monitoring of pathological gait

DC6: Decolonized, just and trustworthy FMs for RHD screening and staging RHD

DC7: Clinically robust and just care pathway embedding FMs-based and wearable technology for decolonized and bias-free monitoring of FOG severity

DC8: Clinically robust and just care pathway embedding FMs and handheld echocardiography or PCG for decolonized and bias-free RHD screening and staging

DC1: DECOLONIZED VALUES AND PRINCIPLES FOR JUST AND TRUSTWORTHY AI IN HEALTHCARE

HIRING INSTITUTION: University of Macerata (Italy)

PHD ENROLLMENT: The doctoral candidate will be enrolled at the Doctoral School of the University of Macerata (Italy), doctoral course “Politics, Society, Technology”.

DOCTORAL SCHOOL AND RESEARCH TEAM

The Doctoral Candidate will be part of the research team on AI ethics and Governance led by prof. Benedetta Giovanola. The research team is embedded in the Department of Political Science, Communication and International Relations at UniMC. The research team’s expertise are on AI ethics, AI governance (both policy and regulatory level), theories of justice and bioethics, as well on decolonized perspectives and decolonial approaches. The research team members include ethicists, legal experts and computer scientists, with an outstanding track record in AI ethics and governance.

OBJECTIVES

Overall objective: Develop, test, validate, and valorise a decolonized ethics and governance framework for just and trustworthy AI in healthcare, with regard to the ethical aspects (values and principles) and tailor it for FMs in the two use cases of FOG and RHD.

Specific research objectives:

- Critically analyse ethical gaps and obstacles that hinder the implementation of social justice in AI in healthcare both at the local and at the global level; identify ethical requirements that allow AI systems in healthcare to be beneficial to just healthcare.
- Develop a robust decolonized ethics and governance framework for just and trustworthy AI in healthcare with regard to the ethical aspects; to tailor it for the two use cases of FOG and RHD.
- Test and validate the Framework through the realization of one pilot action for FOG severity monitoring and one for RHD screening and staging in an every-day life use setting; develop, test and validate (in cooperation with DC2) self-assessment tools for ethical and legal compliance operationalizing the Framework. DC1 will be in charge of the ethical compliance aspects.
- Valorise the Framework providing insights for standardisation, contribute to the recommendations for decision- and policy-makers to boost just and trustworthy AI, and to the elaboration of guidelines for the transferability of the Framework to other health use cases, providing insights on the ethics-related aspects.

EXPECTED RESULTS

- Decolonized ethics and governance framework for just AI in healthcare (in coop. with DC2)
- 2 Self-assessment tools to evaluate ethical/legal compliance of FMs/FMs-based applications (1 for FOG, 1 for RHD), in coop. with DC2.
- Recommendations for decision- and policy-makers to boost just and trustworthy AI for global health (in coop. with DC3 & 4)
- Insights for standardisation providing sector-specific standards based on the project’s case studies (in coop. with DC2)
- Guidelines for the transferability of the Framework to other health use cases (in coop. with DC5, 6, 7&8)

INDICATIVE PLANNED SECONDMENTS - Institution, place and timing

- KU Leuven (Leuven, Belgium); Nov. – Dec. 2026

- University of Pretoria (Pretoria, South Africa); Feb. – Apr. 2027
- BeEthical (Amiens, France); Dec. 2027 – Jan. 2028, and Jun. 2029
- Path Check Inc (Cambridge, USA); Mar. – Apr. 2029

Further analysis might be required, based on the development of research project.

MAIN SUPERVISOR: prof. Benedetta Giovanola (e-mail benedetta.giovanola@unimc.it)
https://docenti.unimc.it/benedetta.giovanola?set_language=en&cl=en

Due to the high transdisciplinarity of the project, the main supervisor will collaborate with other co-supervisors from other project's partners.

ADDITIONAL ESSENTIAL REQUIREMENTS: Master Degree in Philosophy (or related interdisciplinary studies) or in STS (Science Technology and Society), with a background in ethics and/or philosophy of technology, with outstanding study results.

DESIRABLE REQUIREMENTS:

- The qualities to carry out independent research, demonstrated e.g., by the grades obtained in your (under)graduate program(s);
- A critical mindset;
- An international attitude;
- Previous studies or research on AI ethics, including applied research carried out in companies, non-profit organizations, national or supranational institutions, etc.

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the following criterion "Qualifications and previous experience" and related sub-criteria:

Selection criterion and sub-criteria for admission to the shortlist	Score
Qualifications and previous experience:	0-50,0
A. quality of academic performance	12,5
B. current knowledge and expertise	12,5
C. relevant research skills	12,5
D. motivation to apply	12,5

Selection criterion and sub-criteria of shortlisted candidates	Maximum Score
Communication and Personal skills:	0-70,0
E. Ability to design and conduct original research in the subject area of the individual research project	15
F. Excellent oral communication in English	11
G. Enthusiasm, proactivity, creativity and commitment	11
H. Interpersonal skills	11
I. Attitude to team working and in working in local and international setting	11
J. Expected impact of the doctorate on the DC's future career	11

Duration of the employment: 36 months since 1st September 2026 (expected date of the recruitment)

Income: 3.821,53€ Gross per month (45.858,36€ / year)

Benefits

710 € Mobility Allowance per month (8.520€ / year)

660 € Family Allowance per month (7.920€ / year) - Applicable only when the recruited doctoral candidate has family obligations according to the Marie Skłodowska-Curie rules, i.e., when the recruited Doctoral candidate has persons linked to him/her by:

1. marriage, or
2. a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or
3. dependent children who are actually being maintained by the doctoral candidate

Benefits are gross EU contribution to the salary cost of the doctoral candidate. The net salary will result from deducting all compulsory (employer/employee) national social security contributions as well as direct taxes.

HOW TO APPLY

Applications must be sent exclusively through the online application system available here:

<https://www.unimc.it/en/research-bck/justhealth/justhealth-project-application-form/form-justhealth>

DC2: DECOLONIZED GOVERNANCE FOR JUST AND TRUSTWORTHY AI IN HEALTHCARE

HIRING INSTITUTION: University of Macerata (Italy)

PHD ENROLLMENT: The doctoral candidate will be enrolled at the Doctoral School of the University of Macerata (Italy), doctoral course “Politics, Society, Technology”.

DOCTORAL SCHOOL AND RESEARCH TEAM

The Doctoral Candidate will be part of the research team on AI ethics and Governance led by prof. Benedetta Giovanola. The research team is embedded in the Department of Political Science, Communication and International Relations at UniMC. The research team’s expertise are on AI ethics, AI governance (both policy and regulatory level), theories of justice and bioethics, as well on decolonized perspectives and decolonial approaches. The research team members include ethicists, legal experts and computer scientists, with an outstanding track record in AI ethics and governance.

OBJECTIVES

Overall objective: Develop, test, validate, and valorise a decolonized ethics and governance framework for just AI in healthcare, with regard to the governance aspects (policy and regulations) and to tailor it for FMs in the two use cases of FOG and RHD.

Specific research objectives:

- Critically analyse governance (policy/regulations) gaps and obstacles that hinder the implementation of social justice in AI healthcare at local and global level; identify governance requirements that allow AI systems to boost just healthcare.
- Develop decolonized ethics and governance framework for just and trustworthy AI in healthcare with regard to the governance aspects; tailor it for the two use cases of FOG and RHD.
- Test and validate the Framework through the realization of one pilot action for FOG severity monitoring and one for RHD screening and staging in an every-day life use setting; develop, test and validate (in coop. with DC1) self-assessment tools for ethical and legal compliance that operationalize the Framework. DC2 will be in charge of the legal compliance aspects.
- Valorise the Framework providing insights for standardisation, in coop. With DC1. DC2 will be in charge of the governance-related aspects; contribute to the recommendations for decision- and policy-makers to boost just and trustworthy AI, providing insights on the governance-related aspects; contribute to the elaboration of guidelines for the transferability of the Framework to other health use cases, providing insights on the governance-related aspects).

EXPECTED RESULTS

- Decolonized ethics and governance framework for just AI in healthcare (in coop. with DC1);
- 2 Self-assessment tools to evaluate ethical/legal compliance of FMs/FMs-based applications (1 for FOG, 1 for RHD) (in coop. with DC1);
- Recommendations for decision- and policy-makers to boost just and trustworthy AI for global health (in coop. with DC3 & 4);
- Insights for standardisation providing sector-specific standards based on the project’s case studies (in coop. with DC1);
- Guidelines for the transferability of the Framework to other health use cases (in coop. with DC5, 6, 7 & 8).

INDICATIVE PLANNED SECONDMENTS - Institution, place and timing

- KU Leuven (Leuven, Belgium); Nov. - Dec. 2026
- University of Johannesburg (Johannesburg, South Africa); Feb. – Apr. 2027
- BeEthical (Amiens, France); Dec. 2027 – Jan. 2028; Jun. 2029
- Trustees of Tufts College Non Profit Corporation – TUFTS (Massachusetts, USA); Mar. – Apr. 2029.

Further analysis might be required, based on the development of research project.

MAIN SUPERVISOR: prof. Simone Calzolaio (e-mail simone.calzolaio@unimc.it)
https://docenti.unimc.it/simone.calzolaio?set_language=en&cl=en#content=publications

Due to the high transdisciplinarity of the project, the main supervisor will collaborate with other co-supervisors from other project's partners.

ADDITIONAL ESSENTIAL REQUIREMENTS: Master Degree in Law (or related interdisciplinary studies) or Political Sciences or International Relations, with a background in governance studies, with outstanding study results.

DESIRABLE REQUIREMENTS:

- The qualities to carry out independent research, demonstrated e.g., by the grades obtained in your (under)graduate program(s);
- A critical mindset, specifically from the perspective of the analysis of the legal profiles and regulatory profiles of data governance;
- An international attitude;
- Previous studies or research on AI governance (policy and/or regulations), including applied research carried out in companies, non-profit organizations, national or supranational institutions, etc.

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the following criterion "Qualifications and previous experience" and related sub-criteria:

Selection criterion and sub-criteria for admission to the shortlist	Score
Qualifications and previous experience:	0-50,0
A. quality of academic performance	12,5
B. current knowledge and expertise	12,5
C. relevant research skills	12,5
D. motivation to apply	12,5

Selection criterion and sub-criteria of shortlisted candidates	Maximum Score
Communication and Personal skills:	0-70,0
E. Ability to design and conduct original research in the subject area of the individual research project	15
F. Excellent oral communication in English	11
G. Enthusiasm, proactivity, creativity and commitment	11
H. Interpersonal skills	11
I. Attitude to team working and in working in local and international setting	11
J. Expected impact of the doctorate on the DC's future career	11

Duration of the employment: 36 months since 1st September 2026 (expected date of the recruitment)

Income: 3.821,53€ Gross per month (45.858,36€ / year)

Benefits

710 € Mobility Allowance per month (8.520€ / year)

660 € Family Allowance per month (7.920€ / year) - Applicable only when the recruited doctoral candidate has family obligations according to the Marie Skłodowska-Curie rules, i.e., when the recruited Doctoral candidate has persons linked to him/her by:

1. marriage, or
2. a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or
3. dependent children who are actually being maintained by the doctoral candidate

Benefits are gross EU contribution to the salary cost of the doctoral candidate. The net salary will result from deducting all compulsory (employer/employee) national social security contributions as well as direct taxes.

HOW TO APPLY

Applications must be sent exclusively through the online application system available here:

<https://www.unimc.it/en/research-bck/justhealth/justhealth-project-application-form/form-justhealth>

DC3: CO-CREATION STRATEGIES, METHODS AND INSTRUMENTS FOR DECOLONIZED, JUST AND TRUSTWORTHY AI IN HEALTHCARE.

HIRING INSTITUTION: Maastricht University (Netherlands)

PHD ENROLLMENT: The doctoral candidate will be enrolled at the Doctoral School of the Maastricht University (Netherlands), specifically, at the Graduate School of Business and Economics (GSBE). The candidate will be part of an international network of top universities and renowned scholars within the field.

DOCTORAL SCHOOL AND RESEARCH TEAM

We offer a dynamic and challenging position in an internationally oriented organisation, where students receive advanced education and scholars conduct exciting research. You will benefit from high-quality educational programmes and have the opportunity to collaborate with leading scholars engaged in cutting-edge research. We are looking for candidates who share our passion for conducting doctoral work about collaboration, enabled through digital means.

The research team has a very strong publication record and is committed to creating impact both academically and societally. Affiliated with the Department of Marketing & Supply Chain Management (MSCM), the candidate will have access to excellent resources and state-of-the-art digital lab facilities like the SBE DEXlab and the Maastricht Center for Robots (MCR).

OBJECTIVES

Overall objective: Identify and apply co-creation strategies and methods that ensure the meaningful involvement of all the relevant stakeholders, in order to align FMs and FMs-based applications for FOG and RHD with their perspectives.

Specific research objectives:

- Identify gaps and obstacles caused by the lack of co-creation strategies and methods, especially those that prevent the recognition of the public value of social justice in AI for healthcare, both locally and globally. Determine what is needed to build a strong co-creation approach that brings together different types of expertise. Map out the interests, needs, and expectations of various stakeholders. Identify when and how stakeholders should be involved, and which strategies and methods to use. Together with DC4, develop clear protocols that outline these strategies and methods, including specific actions and procedures to follow in the project.
- Create tailored co-creation tools for the FOG and RHD use cases. These tools will support the DCs in developing the project framework, collecting and curating data, and designing FMs and care pathways—all using a participatory, stakeholder-driven approach supported by the Co-Creation Council. Help guide and support the use of these tools throughout the project to maintain an inclusive co-creation process.
- Make sure the co-creation strategies, methods, and tools are embedded in the development of FM-based applications (in collaboration with DC5, 6, 7, and 8) and in the creation of ethical and legal self-assessment tools (developed by DC1 and 2). Also ensure these co-creation elements are integrated into the project's pilot actions.
- Identify what is needed to transfer the framework and other project results to other healthcare contexts. Work with DC5, 6, 7, and 8 to define these transfer conditions, and with DC1, 2, and 4 to develop policy recommendations. These recommendations will highlight the importance of co-creation in ensuring socially just and trustworthy AI in healthcare.

EXPECTED RESULTS

- Documented ecosystem and value map for global healthcare innovation, including shared value propositions
- Documented user segment analysis and detailed process mapping for disease detection relevant to FMs for FOG and RHD
- User-centered design methods and a co-creation toolbox tailored for FOG and RHD
- Recommendations for decision- and policy-makers to promote fair and trustworthy AI systems for equitable global health (in cooperation with DC1, DC2, and DC4)

INDICATIVE PLANNED SECONDMENTS - *Institution, place and timing*

- Meandergroep Zuid Limburg (Landgraaf, Netherlands); Nov. – Dec. 2026
- University of Cape Town (Cape Town, South Africa); Feb. – Apr. 2027; Apr. – May 2028
- Trustees of Tufts College Non Profit Corporation – TUFTS (Massachusetts, USA); Mar. – Apr. 2029.

Further analysis might be required, based on the development of a research project.

MAIN SUPERVISOR: Prof. Dominik Mahr (e-mail d.mahr@maastrichtuniversity.nl)

Due to the high transdisciplinarity of the project, the main supervisor will collaborate with other co-supervisors from other project's partners.

ADDITIONAL ESSENTIAL REQUIREMENTS

We seek candidates who are driven by a genuine passion for academic research and aspire to contribute to the research project's topics.

- Exhibit a strong research orientation and academic motivation
- Hold a Master's degree (preferably 120 ECTS)
- Show familiarity with research methods
- Demonstrate proficiency in the English language

DESIRABLE REQUIREMENTS

- Prior experience with quantitative and/or qualitative research methods; familiarity with software such as R, Python, SPSS, or NVivo is a plus
- Strong motivation for pursuing an academic career, with the intention to publish in international peer-reviewed journals
- Ability to work independently while also being a collaborative team player in a diverse and international environment
- Willingness to engage with industry partners, research institutes and interdisciplinary initiatives

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the following criterion "Qualifications and previous experience" and related sub-criteria:

Selection criterion and sub-criteria for admission to the shortlist	Score
Qualifications and previous experience:	0-50,0
A. quality of academic performance	10
B. current knowledge and expertise	10
C. relevant research skills	10
D. motivation to apply	10
E. good command of Dutch	10

Selection criterion and sub-criteria of shortlisted candidates	Maximum Score
Communication and Personal skills:	0-70,0
F. Ability to design and conduct original research in the subject area of the individual research project	10
G. Excellent oral communication in English	10
H. Enthusiasm, proactivity, creativity and commitment	10
I. Interpersonal skills	10
J. Attitude to team working and in working in local and international setting	10
K. Expected impact of the doctorate on the DC's future career	10
L. Ability to interact with Dutch speaking people	10

Duration of the employment: 48 months since 1st September 2026 (expected date of the recruitment)

Income: 4.475,16 Gross per month (53.701,92€ / year).

- Good employment conditions. The position is graded according to Dutch National PhD Regulations (based on a full-time employment of 38 hours per week). In addition to the monthly salary, an 8.0% holiday allowance and an 8.3% year-end bonus apply.

- An employment contract for a period of 18 months with a scope of 1,0 FTE. Upon a positive evaluation, an extension of 2.5 years will follow.
- At Maastricht University, the well-being of our employees is of utmost importance, we offer flexible working hours and the possibility to work partly from home if the nature of your position allows it. You will receive a monthly commuting and internet allowance for this. If you work full-time, you will be entitled to 29 vacation days and 4 additional public holidays per year, namely carnival Monday, carnival Tuesday, Good Friday, and Liberation Day. If you choose to accumulate compensation hours, an additional 12 days will be added. Furthermore, you can personalize your employment conditions through a collective labor agreement (CAO) choice model.
- As Maastricht University, we offer various other excellent secondary employment conditions. These include a good pension scheme with the ABP and the opportunity for UM employees to participate in company fitness and make use of the extensive sports facilities that we also offer to our students.
- Last but certainly not least, we provide the space and facilities for your personal and professional development. We facilitate this by offering a wide range of training programs and supporting various well-established initiatives such as 'Reward and Recognition'.

Benefits

710 € Mobility Allowance per month (8.520€ / year)

660 € Family Allowance per month (7.920€ / year) - Applicable only when the recruited doctoral candidate has family obligations according to the Marie Skłodowska-Curie rules, i.e., when the recruited Doctoral candidate has persons linked to him/her by:

1. marriage, or
2. a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or
3. dependent children who are actually being maintained by the doctoral candidate

Benefits are gross EU contribution to the salary cost of the doctoral candidate. The net salary will result from deducting all compulsory (employer/employee) national social security contributions as well as direct taxes.

HOW TO APPLY

Applications must be sent exclusively through the online application system available at UM <https://vacancies.maastrichtuniversity.nl/>

DC4: CO-CREATION SKILLS FOR DECOLONIZED, JUST AND TRUSTWORTHY AI IN HEALTHCARE.

HIRING INSTITUTION: Maastricht University (Netherlands)

PHD ENROLLMENT: The doctoral candidate will be enrolled at the Doctoral School of the Maastricht University (Netherlands), specifically, at the Graduate School of Business and Economics (GSBE). The candidate will be part of an international network of top universities and renowned scholars within the field.

DOCTORAL SCHOOL AND RESEARCH TEAM

We offer a dynamic and challenging position in an internationally oriented organisation, where students receive advanced education and scholars conduct exciting research. You will benefit from high-quality educational programmes and have the opportunity to collaborate with leading scholars engaged in cutting-edge research. We are looking for candidates who share our passion for conducting doctoral work about collaboration, enabled through digital means.

The research team has a very strong publication record and is committed to creating impact both academically and societally. Affiliated with the Department of Marketing & Supply Chain Management (MSCM), the candidate will have access to excellent resources and state-of-the-art digital lab facilities like the SBE Digital Experience Lab (DEXlab) and the Maastricht Center for Robots (MCR).

OBJECTIVES

General Background

AI and robots can do a lot of good in healthcare, but only if they are built with the people who use and are affected by it: patients, nurses, doctors, data teams, and communities. This PhD focuses on the skills those people need to work well together (listening, facilitation, ethics, data basics, cultural sensitivity) so that AI is fair, safe, and useful in both high-resource and low-resource settings around the world.

You will map where co-creation breaks down today and why, identify the essential skills different stakeholders need, and design training that works in practice (from simple workshop tools to digital and VR exercises). Together with a sister PhD (DC3), you'll help create an online learning community and clear protocols so healthcare organisations and partners can apply co-creation consistently across projects and contexts.

This is an academic, hands-on, international project. You will co-design, test, and improve the training with real users, then evaluate what people learn and how it changes outcomes. You'll also translate results into practical recommendations for healthcare managers and policy-makers.

Overall objective: Identify essential co-creation skills and key competencies for relevant stakeholders and facilitators, and develop related training materials across diverse international and cultural contexts.

Specific research objectives:

- Identify gaps and obstacles caused by a lack of co-creation skills that hinder the recognition of the public value of social justice in AI for healthcare, both locally and globally. Identify the essential co-creation skills needed for integrating the expertise and backgrounds of stakeholders in the healthcare ecosystem, in both the Global North and the Global South. Determine the most suitable training strategies and content to enhance these skills. In collaboration with DC3, develop protocols that define a set of strategies and methods to build

co-creation skills, to be implemented throughout the project in support of a robust co-creation approach.

- Develop training strategies, methods, content, and materials tailored to the healthcare ecosystem in both the Global North and Global South, aimed at strengthening co-creation capabilities. Establish an online platform that incorporates cutting-edge digital technologies to facilitate communication and learning among a global community of stakeholders. In collaboration with DC3, explore how this learning community can foster the development of co-creation processes and skills in the challenging global context.
- Open the above-mentioned platform to all stakeholders involved in the pilot actions, both in the West and the Global South. Test and validate the training strategies, methods, content, and materials by delivering targeted training initiatives to pilot participants. Validation will include collecting action reviews after the training and assessing learning outcomes and proficiency levels among DCs and stakeholders.
- Support the identification of conditions for the transferability of the Framework and other project outputs by identifying the co-creation skills required for application in other healthcare contexts (in collaboration with DC5, 6, 7, and 8). Develop recommendations for decision-makers and policy-makers that emphasize the critical role of co-creation skills (in collaboration with DC1, 2, and 3).

EXPECTED RESULTS:

- Defined set of co-creation skills for the global healthcare innovation ecosystem
- Establishment of a learning community to foster continuous exchange and development
- Blended training approach, combining non-digital and digital methods
- Use of state-of-the-art training tools, including online communities and virtual reality environments

INDICATIVE PLANNED SECONDMENTS - *Institution, place and timing*

- Altuïtion BV ('s-Hertogenbosch, Netherlands); Nov. – Dec. 2026
- University of Cape Town (Cape Town, South Africa); Feb. – Apr. 2027; Apr. – May 2028
- Path Check Inc (Cambridge, USA); Mar. – Apr. 2029

Further analysis might be required, based on the development of research project.

MAIN SUPERVISOR: Prof. Gaby Odekerken-Schroeder (e-mail: g.odekerken@maastrichtuniversity.nl) and Prof. Dominik Mahr (e-mail: d.mahr@maastrichtuniversity.nl)

Due to the high transdisciplinarity of the project, the main supervisor will collaborate with other co-supervisors from UM and other project's partners.

ADDITIONAL ESSENTIAL REQUIREMENTS

We seek candidates who are driven by a genuine passion for academic research and aspire to contribute to the research project's topics.

- Exhibit a strong research orientation and academic motivation
- Hold a Master's degree (preferably 120 ECTS)
- Show familiarity with research methods
- Demonstrate proficiency in the English language

DESIRABLE REQUIREMENTS

- Prior experience with quantitative and/or qualitative research methods; familiarity with software such as R, Python, SPSS, or NVivo is a plus
- Strong motivation for pursuing an academic career, with the intention to publish in international peer-reviewed journals
- Ability to work independently while also being a collaborative team player in a diverse and international environment
- Willingness to engage with industry partners, research institutes and interdisciplinary initiatives

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the following criterion “Qualifications and previous experience” and related sub-criteria:

Selection criterion and sub-criteria for admission to the shortlist	Score
Qualifications and previous experience:	0-50,0
A. quality of academic performance	10
B. current knowledge and expertise	10
C. relevant research skills	10
D. motivation to apply	10
E. good command of Dutch	10

Selection criterion and sub-criteria of shortlisted candidates	Maximum Score
Communication and Personal skills:	0-70,0
F. Ability to design and conduct original research in the subject area of the individual research project	10
G. Excellent oral communication in English	10
H. Enthusiasm, proactivity, creativity and commitment	10
I. Interpersonal skills	10

J. Attitude to team working and in working in local and international setting	10
K. Expected impact of the doctorate on the DC's future career	10
L. Ability to interact with Dutch speaking people	10

Duration of the employment: 48 months since 1st September 2026 (expected date of the recruitment)

Income: 4.475,16 Gross per month (53.701,92€ / year).

- Good employment conditions. The position is graded according to Dutch National PhD Regulations (based on a full-time employment of 38 hours per week). In addition to the monthly salary, an 8.0% holiday allowance and an 8.3% year-end bonus apply.
- An employment contract for a period of 18 months with a scope of 1,0 FTE. Upon a positive evaluation, an extension of 2.5 years will follow.
- At Maastricht University, the well-being of our employees is of utmost importance, we offer flexible working hours and the possibility to work partly from home if the nature of your position allows it. You will receive a monthly commuting and internet allowance for this. If you work full-time, you will be entitled to 29 vacation days and 4 additional public holidays per year, namely carnival Monday, carnival Tuesday, Good Friday, and Liberation Day. If you choose to accumulate compensation hours, an additional 12 days will be added. Furthermore, you can personalize your employment conditions through a collective labor agreement (CAO) choice model.
- As Maastricht University, we offer various other excellent secondary employment conditions. These include a good pension scheme with the ABP and the opportunity for UM employees to participate in company fitness and make use of the extensive sports facilities that we also offer to our students.
- Last but certainly not least, we provide the space and facilities for your personal and professional development. We facilitate this by offering a wide range of training programs and supporting various well-established initiatives such as 'Reward and Recognition'.

Benefits

710 € Mobility Allowance per month (8.520€ / year)

660 € Family Allowance per month (7.920€ / year) - Applicable only when the recruited doctoral candidate has family obligations according to the Marie Skłodowska-Curie rules, i.e., when the recruited Doctoral candidate has persons linked to him/her by:

1. marriage, or
2. a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or
3. dependent children who are actually being maintained by the doctoral candidate

Benefits are gross EU contribution to the salary cost of the doctoral candidate. The net salary will result from deducting all compulsory (employer/employee) national social security contributions as well as direct taxes.

HOW TO APPLY

Applications must be sent exclusively through the online application system available at UM <https://vacancies.maastrichtuniversity.nl/>

DC5: Development and validation of gait foundation models: use-cases in bias-free monitoring of pathological gait

HIRING INSTITUTION: KU Leuven (Belgium)

PHD ENROLLMENT: The doctoral candidate will be enrolled at the Arenberg Doctoral School of KU Leuven (Belgium)

DOCTORAL SCHOOL AND RESEARCH TEAM

The PhD researcher will be part of the eMedia research lab under the supervision of Prof. Bart Vanrumste. The research group is embedded in the Department of Electrical Engineering (ESAT) of KU Leuven. Prof. Vanrumste's research focuses on multimodal sensor integration and machine learning for monitoring of older persons and patients with chronic diseases.

OBJECTIVES

Overall objective: To develop, test, validate, and valorise a decolonized, just and trustworthy FMs and an FMs-based application for assessing FOG severity in the clinic and everyday life (the FOG severity assessment will be one use case to test and validate the Framework).

Specific research objectives:

- Analyse the technical gaps and obstacles that hinder the implementation of social justice in AI systems in healthcare for FOG; identify technical requirements for the development of just FMs-based solutions for FOG.
- Develop a data collection method embedding wearable IMU sensors for monitoring FOG in everyday life and providing FOG severity assessment; curate a database of large-scale multi-label gait datasets; develop FMs that can be pretrained based on the curated database, fine-tuned to assess FOG severity, and include semi-automatic bias detection and mitigation.
- Develop an application for FMs-based enhanced FOG severity assessment in the clinic and everyday life; test and validate the FMs-based application for FOG severity assessment through a pilot action in an every-day life use setting.
- According to the technical perspective, investigate the transferability of the FM-based application for FOG to other clinically relevant gait assessment use-cases; provide insights for standardisation from the technical/engineering perspective.

EXPECTED RESULTS:

- Meticulously curated multi-label datasets for the development of gait assessment FMs;
- A FM for assessing FOG severity;
- A FMs-based application for FOG severity assessment.

INDICATIVE PLANNED SECONDMENTS

- Radboud University Medical Center (Nijmegen, Netherlands)
- Emory University (Atlanta, USA)

Further analysis might be required, based on the development of research project.

MAIN SUPERVISOR: Prof. Bart Vanrumste (e-mail: bart.vanrumste@kuleuven.be)

Due to the high transdisciplinarity of the project, the main supervisor will collaborate with other co-

supervisors from other project's partners.

ADDITIONAL ESSENTIAL REQUIREMENTS: Master Degree in Engineering with a background in mechanical engineering, electrical engineering, computer science, AI, or related field, with outstanding study results.

DESIRABLE REQUIREMENTS:

- Programming experience in Python, particular experience in common deep learning frameworks (e.g., PyTorch and TensorFlow) would be a benefit;
- The qualities to carry out independent research, demonstrated e.g., by the grades obtained in your (under)graduate program(s);
- Is comfortable assisting in data collection experiments with participants in general but older ones in particular;
- A critical mindset.

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the following criterion "Qualifications and previous experience" and related sub-criteria:

Selection criterion and sub-criteria for admission to the shortlist	Score
Qualifications and previous experience:	0-50,0
A. quality of academic performance	12,5
B. current knowledge and expertise	12,5
C. relevant research skills	12,5
D. motivation to apply	12,5

Selection criterion and sub-criteria of shortlisted candidates	Maximum Score
Communication and Personal skills:	0-70,0
E. Ability to design and conduct original research in the subject area of the individual research project	15
F. Excellent oral communication in English	11
G. Enthusiasm, proactivity, creativity and commitment	11

H. Interpersonal skills	11
I. Attitude to team working and in working in local and international setting	11
J. Expected impact of the doctorate on the DC's future career	11

Duration of the employment: 48 months since 1st September 2026 (expected date of the recruitment)

Income: 4.010,00 € Gross per month (48.120,00€ / year).

Benefits

710 € Mobility Allowance per month (8.520€ / year)

660 € Family Allowance per month (7.920€ / year) - Applicable only when the recruited doctoral candidate has family obligations according to the Marie Skłodowska-Curie rules, i.e., when the recruited Doctoral candidate has persons linked to him/her by:

1. marriage, or
2. a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or
3. dependent children who are actually being maintained by the doctoral candidate

Benefits are gross EU contribution to the salary cost of the doctoral candidate. The net salary will result from deducting all compulsory (employer/employee) national social security contributions as well as direct taxes.

HOW TO APPLY

Applications must be sent exclusively through the online application system of KU Leuven by following the link specified in the vacancy at <https://www.kuleuven.be/personeel/jobsite/jobs/staff?lang=en>.

DC6: DECOLONIZED, JUST AND TRUSTWORTHY FMS FOR RHD SCREENING AND STAGING

HIRING INSTITUTION: KU Leuven (Belgium)

PHD ENROLLMENT: The doctoral candidate will register with KU Leuven's Arenberg Doctoral School (Science, Engineering & Technology group) and follow the Doctoral Programme in Engineering Technology delivered by the Faculty of Engineering Technology (FET). Progress is tracked in the KU Locket "roadmap" with formal milestone reviews at month 9, 21 and 36, after which the thesis may proceed to internal and public defence (target month 48). FET's house rules underline industry-oriented research, multi-campus facilities and strong valorisation support, while the doctoral school offers complementary skills workshops, inter-university course exchanges, providing a structured yet flexible framework for high-impact doctoral work.

DOCTORAL SCHOOL AND RESEARCH TEAM

The PhD researcher will be part of the eMedia research lab under the supervision of Prof. Bart Vanrumste. The research group is embedded in the Department of Electrical Engineering (ESAT) of KU Leuven. Prof. Vanrumste's research focuses on multimodal sensor integration and machine learning for monitoring of older persons and patients with chronic diseases

OBJECTIVES

Overall objective: Develop, test, validate, and valorise a decolonized, just and trustworthy FMs and an FMs-based application for RHD staging for community-based screening (RHD screening and staging will be the 2nd use case to test and validate the Framework).

Specific research objectives:

- Analyse technical gaps and obstacles that hinder the implementation of social justice in AI systems in healthcare for RHD; Identify the technical requirements for the development of just FMs-based solutions for RHD.
- Develop a data collection workflow utilizing handheld echocardiography and Phonocardiography (PCG) for RHD screening and staging; Curate a comprehensive database of large-scale echocardiogram and heart sound data; Develop scalable FMs allowing clinicians to semi-automatically detect and mitigate biases in FM-based RHD screening and staging.
- Develop an application for FM-based RHD screening and staging based on handheld echocardiography and PCG data; test and validate the FMs-based application for RHD screening and staging through a pilot action in an every-day life use setting.
- According to the technical perspective, explore the possibility of adapting the FM-based application for RHD for use in diagnosing other related cardiovascular diseases; provide insights for standardisation from the technical/engineering perspective.

EXPECTED RESULTS

- Curated and labelled dataset of handheld echocardiogram and PCG for the development of the proposed FM;
- A FM for RHD screening and staging;
- A FMs-based application for RHD screening and staging easily usable by a nurse or community health worker in a school or community screening programme.

INDICATIVE PLANNED SECONDMENTS - Institution, place and timing

- University of Cape Town (Cape Town, South Africa); Nov. – Dec. 2026; Jun. – Aug. 2028
- Emory University (Atlanta, USA); Mar. – Jun 2029

Further analysis might be required, based on the development of research project.

MAIN SUPERVISOR: Prof. Bart Vanrumste (<https://www.kuleuven.be/wieiswie/en/person/00045098>) (e-mail: bart.vanrumste@kuleuven.be)

Due to the high transdisciplinarity of the project, the main supervisor will collaborate with other co-supervisors from other project's partners.

ADDITIONAL ESSENTIAL REQUIREMENTS: A master's degree in Engineering and Engineering Technology with a background in electrical engineering, biomedical engineering, computer science, AI, or related field, from a reputable institute, with outstanding study results.

DESIRABLE REQUIREMENTS:

- Programming experience in Python, particular experience in common deep learning frameworks (e.g., PyTorch and TensorFlow) ;
- The qualities to carry out independent research, demonstrated e.g., by the grades obtained in your (under)graduate program(s);
- Is comfortable assisting in data collection experiments with participants in school or community based data collection campaigns;
- Willing to carry out brief research stays at research institutes abroad;
- A critical mindset.

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the following criterion "Qualifications and previous experience" and related sub-criteria:

Selection criterion and sub-criteria for admission to the shortlist	Score
Qualifications and previous experience:	0-50,0
A. quality of academic performance	12,5
B. current knowledge and expertise	12,5
C. relevant research skills	12,5
D. motivation to apply	12,5

Selection criterion and sub-criteria of shortlisted candidates	Maximum Score
Communication and Personal skills:	0-70,0
E. Ability to design and conduct original research in the subject area of the individual research project	15
F. Excellent oral communication in English	11
G. Enthusiasm, proactivity, creativity and commitment	11
H. Interpersonal skills	11
I. Attitude to team working and in working in local and international setting	11
J. Expected impact of the doctorate on the DC's future career	11

Duration of the employment: 48 months since 1st September 2026 (expected date of the recruitment)

Income: 4.010,00 € Gross per month (48.120,00€ / year).

Benefits

710 € Mobility Allowance per month (8.520€ / year)

660 € Family Allowance per month (7.920€ / year) - Applicable only when the recruited doctoral candidate has family obligations according to the Marie Skłodowska-Curie rules, i.e., when the recruited Doctoral candidate has persons linked to him/her by:

1. marriage, or
2. a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or
3. dependent children who are actually being maintained by the doctoral candidate

Benefits are gross EU contribution to the salary cost of the doctoral candidate. The net salary will result from deducting all compulsory (employer/employee) national social security contributions as well as direct taxes.

HOW TO APPLY

Applications must be sent exclusively through the KU Leuven online application system available here: <https://www.kuleuven.be/personeel/jobsite/>

DC7: CLINICALLY ROBUST AND JUST CARE PATHWAY EMBEDDING FMS-BASED AND WEARABLE TECHNOLOGY FOR DECOLONIZED AND BIAS-FREE MONITORING OF FOG SEVERITY

HIRING INSTITUTION: Radboud University Medical Center (Netherlands)

PHD ENROLLMENT: The doctoral candidate will be enrolled at the Radboud University Medical Centre (Nijmegen, Netherlands)

DOCTORAL SCHOOL AND RESEARCH TEAM

You will be embedded within the research groups of the Department of Rehabilitation at Radboudumc and the Center of Expertise for Parkinson's Disease. Radboudumc is a global leader in the field of Parkinson's disease and neurological gait disorders.

OBJECTIVES

Overall objective: The effectiveness of interventions—such as medication adjustments or deep brain stimulation—for gait impairments in Parkinson's disease is currently assessed through snapshot evaluations in clinical settings. However, a more accurate assessment would ideally be based on data collected during daily life. To achieve this, an interactive dashboard should be developed in co-creation with all relevant stakeholders, including people with Parkinson's disease, caregivers, physiotherapists, and clinicians. This interface should then be tested and validated in a pilot study, for example by assessing the impact of on-demand cueing on freezing of gait.

Specific research objectives:

- Analyse clinical gaps and obstacles that hinder the implementation of social justice in AI systems for FOG; Identify co-creation requirements regarding clinical aspects for a just and robust care pathway embedding FMs-based solutions for FOG.
- Develop a clinically reliable data collection method for monitoring real-world FOG severity; determine the clinician requirements for FM-based monitoring of FOG severity in the clinic and everyday life; investigate the validity of the finetuned FM against expert video-ratings for FOG severity assessment; investigate the validity of the finetuned FM in assessing FOG severity with respect to varying forms of apprehension bias (assessment in the lab vs. in everyday life); define a novel sustainable, scalable and just care pathway embedding decolonised FM-based technology for FOG severity assessment, for a better management of FOG.
- Test and validate the care pathway through a pilot action in an every-day life use setting.
- According to the clinical perspective, investigate the transferability of the FM-based solution and care pathway for FOG to other clinically relevant gait assessment use-cases; provide insights for standardisation from the clinical perspective.

EXPECTED RESULTS:

- A sustainable, scalable and just data collection method that captures real-world freezing of gait severity;
- A sustainable, scalable and just care pathway for better management of freezing of gait in persons with Parkinson's disease.

INDICATIVE PLANNED SECONDMENTS - *Institution, place and timing*

- KU Leuven (Leuven, Belgium); Nov. 2026; Mar. - May 2027; Mar. – Apr. 2029
- Cue2Walk International B.V. (Den Haag, Netherlands); Dec. 2026; May – Jun. 2029

Further analysis might be required, based on the development of research project.

MAIN SUPERVISOR: Dr. Jorik Nonnekes (e-mail: Jorik.Nonnekes@radboudumc.nl)

Due to the high transdisciplinarity of the project, the main supervisor will collaborate with other co-supervisors from other project's partners.

ADDITIONAL ESSENTIAL REQUIREMENTS:

- Completed Master's degree (e.g., Cognitive Neuroscience, Biomedical Sciences, Medical Biology, Medicine)
- You are ambitious, a creative thinker, and possess excellent organizational skills
- You are a team player
- You have an interest in Parkinson's disease, and gait disorders
- You have experience with data collection and data analysis
- You have excellent communication and social skills, enabling pleasant and effective interaction with study participants.

DESIRABLE REQUIREMENTS:

Good command of Dutch

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the following criterion "Qualifications and previous experience" and related sub-criteria:

Selection criterion and sub-criteria for admission to the shortlist	Score
Qualifications and previous experience:	0-50,0
A. quality of academic performance	10
B. current knowledge and expertise	10
C. relevant research skills	10
D. motivation to apply	10
E. Good command of Dutch	10

Selection criterion and sub-criteria of shortlisted candidates	Maximum Score
Communication and Personal skills:	0-70,0
F. Ability to design and conduct original research in the subject area of the individual research project	10
G. Excellent oral communication in English	10
H. Enthusiasm, proactivity, creativity and commitment	10
I. Interpersonal skills	10
J. Attitude to team working and in working in local and international setting	10
K. Expected impact of the doctorate on the DC's future career	10
L. Ability to interact with Dutch speaking patients and caregivers	10

Duration of the employment: 36 months since 1st September 2026 (expected date of the recruitment)

Income:

At Radboud university medical center, you build on your future. We are committed to providing the best care, education, and research. And we are true to our word, because we help you develop and seize opportunities and give you the room to grow. As an employer, we believe that employees should feel vital and happy at work in all stages of life. We are also committed to creating a healthy and safe working environment. Our employment conditions contribute to that. What we offer:

- Upon commencement of employment, you will start at scale 10A, step 0 (€ 3.108 based on a full-time appointment). Over a maximum period of 4 years, you will progress to scale 10A, step 3 (€3.939 based on a full-time appointment). You will also receive an 8% holiday allowance, an 8.3% end-of-year bonus, and a 47% to 72% bonus for working unsocial hours.
- 176 vacation hours per year based on a 36-hour working week.

Benefits

- An Employment Conditions Selection Model, allowing you to use part of your employment conditions to your choosing. For example, you can use your gross salary to purchase additional vacation hours or hours for providing informal caregiving. Or, for example, you can use your gross end-of-year bonus to purchase a bicycle, so you pay less tax.
- Plenty of opportunities for personal development. You can take a variety of courses in our online learning environment.
- Your well-being and vitality are a priority. For example:
 - Save time for work-life balance leave.

- You can enjoy unlimited access to a variety of activities five days a month and take advantage of all the facilities at Radboud Sport & Culture for only €27.05 per month (instead of €41)
- Healthy Professionals program to help you manage your energy.
- Company Support Team and a personal coach if you are going through a life-changing event.
- Financially beneficial working less through a Generation Scheme as you approach state pension age.
- Support in achieving a good work-life balance at every stage of your life. Examples:
 - Advice and courses on, for example, 'Millennial dilemmas' and 'Your Career After 57'.
 - Activities at our own mindfulness center.
 - Informal caregiving consultations if you have questions about juggling work and caregiving responsibilities at home.
- In addition to statutory pregnancy and maternity leave, Radboud university medical center offers 26 weeks of parental leave, nine of which are paid. In addition, as a partner you can take a maximum of five weeks of supplementary partner leave. During supplementary partner leave and parental leave, we supplement the UWV benefit up **to 100% of your salary**.
- Pension accrual at the ABP Pension Fund. Radboud university medical center pays 70% of the pension premium.
- Discounts on supplementary packages of two group health insurances and ten other types of insurance, from home insurance to legal assistance.
- An allowance for your commuting costs of € 0.18 per km up to a maximum of 40 km one way. If you use public transport to commute, we will fully reimburse the public transport costs (2nd class). If you regularly work from home, you will receive a working from home allowance of € 2.40 per day.

HOW TO APPLY

Applications must be sent exclusively through the online application system available here:

<https://www.radboudumc.nl/en/vacancies>

DC8: CLINICALLY ROBUST AND JUST CARE PATHWAY EMBEDDING FMS AND HANDHELD ECHOCARDIOGRAPHY OR PCG FOR DECOLONIZED AND BIAS-FREE RHD SCREENING AND STAGING

HIRING INSTITUTION: University of Cape Town (South Africa)

PHD ENROLLMENT: The candidate will hold a joint PhD registration with KU Leuven's Doctoral School of Biomedical Sciences (Faculty of Biomedical Sciences) and the University of Cape Town's Faculty of Health Sciences, and will therefore comply with the formal requirements of both institutions. At KU Leuven the researcher signs the *Charter of the PhD Researcher and Supervisor* and uploads it to KU Loket within the first three months; submits a *Provisional Doctoral Plan* by month 6; presents a *Research Seminar* in year 2; files a *Final Doctoral Plan* in year 3; and completes the remaining milestones, exam committee composition, thesis submission and public defence, normally by the end of year 4, with all steps logged in the KU Loket "PhD Progress" tool. The Biomedical Sciences Doctoral School also requires a minimum of ≈ 5 ECTS of doctoral-training activities across research-integrity modules, seminars (≥ 10 h per year), journal clubs and work-in-progress sessions, all documented in an e-portfolio that must be approved before the thesis can be defended.

At the University of Cape Town the candidate registers under the Doctoral Degrees Board (DDB) in Health Sciences; initial admission is confirmed by the Dean once a satisfactory research proposal and supervisory arrangement are in place, and annual re-registration is required by the end of February on the basis of joint supervisor–candidate progress reports. The DDB regulations stipulate a minimum of two separate years of registration, a thesis of up to 80 000 words (unless the Dean approves a longer manuscript) and a credit volume of 360 NQF credits at level 10, all delivered as an original body of research examined by a Committee of Assessors; thesis submission deadlines of 15 February (June graduation) and 15 August (December graduation) apply.

DOCTORAL SCHOOL AND RESEARCH TEAM

Doctoral School & Research Team (KU Leuven) – The candidate will be embedded in the Doctoral School of Biomedical Sciences (DSBS) at KU Leuven, affiliating with the "Emerging Concepts in Cardiovascular Medicine" thematic programme, which couples structured skills training (research integrity, transferable skills workshops, journal clubs). DSBS gives direct access to Leuven's high end Core Facilities including 4 D ultra high frame rate echocardiography and cardiac MRI. Scientific supervision is led by Prof Jens Uwe Voigt, full professor of cardiology and member of the DSBS Committee, who heads the University Hospitals Leuven Echocardiography Lab and an imaging group of several international PhD fellows. His team is internationally recognised for myocardial strain, shear wave elastography and cardiac mechanics, and collaborates with EACVI/ASE task forces on imaging standardisation, providing the candidate with a world class training environment in quantitative cardiovascular imaging.

Doctoral School & Research Team (University of Cape Town) – At UCT the student registers under the Faculty of Health Sciences and the Doctoral Degrees Board (DDB): Research will be anchored in the Children's Heart Disease Research Unit (CHDRU) within Red Cross War Memorial Children's Hospital, directed by Prof Liesl Zühlke, South Africa's first female full professor in paediatric cardiology and an African Research Leader Awardee. CHDRU coordinates the continent wide PROTEA

cohort and multiple NIH/MRC funded studies on rheumatic and congenital heart disease, HIV related cardiomyopathy and cardiac disease in women, giving unparalleled access to longitudinal clinical datasets, community screening platforms and policy influencing networks. Prof Zühlke's leadership roles in the South African Heart Association, Pan African Society of Cardiology and World Heart Federation will further expose the candidate to global health advocacy and multicentre trial governance.

OBJECTIVES

Overall objective: Develop, test, validate, and valorise a reliable, scalable and just care pathway, embedding FM-based technology for the screening and staging of RHD (2nd use case to test and validate the Framework).

Specific research objectives:

- Analyse clinical gaps and obstacles that hinder the implementation of social justice in AI systems for RHD; Identify co-creation requirements regarding clinical aspects for a just and robust care pathway embedding FMs-based solutions for RHD.
- Develop clinically reliable data collection method for the use of handheld echocardiogram and PCG for RHD screening and staging; determine clinician requirements for FMs-based screening of RHD; investigate validity of the finetuned FMs against the gold standard for RHD screening and staging; define a sustainable, scalable and just care pathway embedding developed FM-based enhanced handheld echocardiography and PCG based RHD screening FM in non-clinical setup by nurse or community health worker.
- Test and validate the care pathway through a pilot action in an every-day life use setting.
- According to the clinical perspective, investigate the transferability of the FM-based solution and care pathway for RHD to other clinically relevant cardiovascular diseases; provide insights for standardisation from the clinical perspective.

EXPECTED RESULTS:

- A sustainable, scalable and just handheld echocardiography and PCG based data collection method that captures RHD at its different stages of severity in everyday life;
- Annotated handheld echocardiogram and PCG datasets of RHD for the finetuning of FM;
- A sustainable, scalable and just care pathway embedding FM-based technology for the screening and staging of RHD.

INDICATIVE PLANNED SECONDMENTS - *Institution, place and timing*

- KU Leuven (Leuven, Belgium); Nov. – Dec. 2026; Aug. – Sept. 2027; Oct. – Nov. 2027; May – Jun. 2029
- Path Check Inc (Cambridge, USA); Mar. – Apr. 2029

Further analysis might be required, based on the development of research project.

MAIN SUPERVISOR: Prof. Jens-Uwe Voigt (e-mail: jens-uwe.voigt@uzleuven.be) and Prof. Liesl Zühlke (e-mail: Liesl.Zuhlke@mrc.ac.za)

Due to the high transdisciplinarity of the project, the main supervisor will collaborate with other co-

supervisors from other project's partners.

ADDITIONAL ESSENTIAL REQUIREMENTS: Completed Master's degree (or equivalent, minimum EQF level 7 / South African NQF level 9) in Medicine, Biomedical Engineering, Health Informatics or a closely related field, awarded with at least upper-second-class honours / cum laude.

DESIRABLE REQUIREMENTS:

- **Foundational clinical competence in cardiovascular health:** either an MBChB/MD with completed internship, or documented coursework/research experience in cardiology, echocardiography or phonocardiography.
- Prior hands-on experience with **handheld echocardiography, phonocardiography (PCG) devices or field cardiology screening** in low-resource settings.
- Experience engaging **community health workers or patient advocacy groups** in co-creation or implementation-science projects.
- Demonstrated capability in **human-centred design or qualitative research methods** (e.g. focus groups, ethnographic fieldwork) relevant to care-pathway development.
- Proven ability to **manage interdisciplinary collaborations** across clinical, engineering and social-science teams.

SELECTION CRITERIA

All eligible applications will be assessed by a Selection panel according to the following criterion "Qualifications and previous experience" and related sub-criteria:

Selection criterion and sub-criteria for admission to the shortlist	Score
Qualifications and previous experience:	0-50,0
A. quality of academic performance	10
B. current knowledge and expertise	10
C. relevant research skills	10
D. motivation to apply	10
E. Knowledge, expertise and experience relating specifically to Rheumatic Heart Disease (5) Equity targets as per University of Cape Town: African Female/male, Coloured Female/Male, Indian Female/Male , White Females and those with declared Disability (5)	10

Selection criterion and sub-criteria of shortlisted candidates	Maximum Score
Communication and Personal skills:	0-70,0
F. Ability to design and conduct original research in the subject area of the individual research project	15
G. Excellent oral communication in English	11
H. Enthusiasm, proactivity, creativity and commitment	11
I. Interpersonal skills	11
J. Attitude to team working and in working in local and international setting	11
K. Expected impact of the doctorate on the DC's future career	11

Duration of the employment: 48 months since 1st September 2026 (expected date of the recruitment)

Income: 2.526,30€ Gross per month (30.315,60€ / year).

Benefits

710 € Mobility Allowance per month (8.520€ / year)

660 € Family Allowance per month (7.920€ / year) - Applicable only when the recruited doctoral candidate has family obligations according to the Marie Skłodowska-Curie rules, i.e., when the recruited Doctoral candidate has persons linked to him/her by:

1. marriage, or
2. a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or
3. dependent children who are actually being maintained by the doctoral candidate

Benefits are gross EU contribution to the salary cost of the doctoral candidate. The net salary will result from deducting all compulsory (employer/employee) national social security contributions as well as direct taxes.

HOW TO APPLY

Applications must be sent exclusively through the online application system provided.