EWUU Alliance: AI for Health Call for projects 2022
Submission deadline 10 July 2022

Terms and Conditions
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Driving forward the development and application of AI to the benefit of society.

1. Introduction - AI for Health Working Group of the EWUU Alliance
Eindhoven University of Technology, Wageningen University & Research, Utrecht University and University Medical Center Utrecht entered a strategic alliance (EWUU Alliance) in 2019 with the aim of working intensively together on several themes where the partners are complementary and can strengthen each other: Health, Food, Energy and Circular Society.

AI for Health is one of the five working groups within the EWUU alliance. All four partners in the EWUU alliance have unique track records on the subject and represent a great framework to set up interdisciplinary collaborations, consortia and acquire grants in the field of AI for Health.

The mission of AI for Health is to drive forward the development and application of AI to the benefit of society. AI and data science play a key role in solving societal challenges. We address these challenges both through theoretical development and application to real-world problems.

The goals of the AI for Health working group are to:

o Gain a competitive position in the AI landscape for the EWUU Alliance by enabling shared scientific breakthroughs in trustworthy AI that improves whole-life health.
o Promote complementarity and create synergies in AI research within the EWUU Alliance and with external partners.
o The above activities should lead to AI innovations that improve the quality of life and health(care) in the Netherlands and beyond.

2. Purpose of the AI for Health Seed Fund
The purpose of this **second** call for proposals is to facilitate and financially support cross disciplinary collaborations between the four EWUU Alliance institutions **that are geared towards large initiatives, applied or methodological, in the field of AI for Health** as defined in the following three topic areas:

1. **Methods and building blocks for trustworthy AI.** Data Science and AI are key enablers for scientific discovery and revolutionize the way we do science and practice health and healthcare. However, an intrinsic challenge of working with AI methods is misuse, concerns with validity, accuracy, transportability and thus implementation, and other unwanted effects such as difficulties with explainability and transparency. The AI for Health working group encourages applications on fundamental or methodological research leading to improved trustworthiness, validation, transportability and transparency of AI innovations in the health and healthcare ecosystem.

2. **Smart Healthcare and Prevention.** The entire healthcare continuum, from cure to care to distant monitoring to self-care to prevention, is an important application area for the AI for

Health working group. We encourage projects on AI innovations that contribute to the transition from invasive to minimally invasive and more personalized care and from reactive to proactive care, including distant and self-care, to primary prevention.

3. **AI-driven healthy and sustainable ecosystem**. Health is broader than healthcare. Therefore, the AI for Health working group stimulates research projects that strive to apply AI innovations to create a more sustainable, circular, and healthier ecosystem (human, animal, plant, environment).

3. Type of projects and priority areas
The seed fund grants can be used for activities to support preparing a larger grant application related to AI for Health in the near future (e.g. Horizon Europe, Digital Europe, NL AIC calls, NWA, NWO, ZonMW, charitable funds ("*collectebusfondsen*")) including but not limited to:
o Grant writing support (both internal and external support)
o Conducting necessary preliminary research to successfully apply for a larger grant soon.

Priority areas include:
o Research projects working on AI solutions to major challenges in the three research lines (see Section 2), both through theoretical development and application to real-world problems.
o Innovative, cross disciplinary development of data science and AI.
o The experts involved in the project show a clear complementarity. It must be clear that working with alliance partners leads to a new combination of complementary expertise and that without this specific combination of expertise the research is not possible.
o To simulate creating an impact of AI-based solutions in real life as opposed to the validation "in-silico", the Seed Fund will also prioritize applied research projects, such as:
  - Projects aimed at societal added value for private or public partners who are willing to match funding to the seed fund grant. From the external partners (both profit and non-profit) we require an in-kind contribution (in the form of hours of an employee of the external party) to ensure that the research will generate value for the external organisation. In addition, we expect a cash contribution from profit partners that is at least equal to the amount that is paid by the AI for Health Seed Fund (from non-profit organisations we only expect an in-kind contribution)
  - Chain projects. Instead of working in silos, all necessary stakeholders shall work together in projects to force breakthrough and accelerated application of new AI technology, focused on innovative solutions with applications of AI product, process or service. These projects shall demonstrably contribute to solving a failure mechanism.
o Innovations that can provide matching funds, have the potential to obtain Intellectual Property (IP) or lead to external partnerships, and thus yield value creation for the society.
o Fit with (inter)national research agendas and chances of receiving external funding.

Funds may be used for:
o Salary of faculty staff and student assistants.
o Fees for staff or organisations who support grant writing.
o Travel directly associated with the proposed activity (for example, travel to match-making events related to grant application).

The seed fund **cannot** be used for:
o Matching in a grant application.
o Financing the extension of the contract of a PhD student.[1]
o The purchase of software, hardware or other devices unless such items are crucial to the execution of the research project and cannot be obtained through the regular support services of the institution where the researcher has been appointed.

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[1] An exception is the following situation: the PhD student has completed his/her work for the dissertation and still has some time left in the contract. The PhD student may then be included in the budget for the new project as a PhD student. It should therefore be clear that the PhD student will be carrying out new work that falls outside the scope of the PhD assignment.

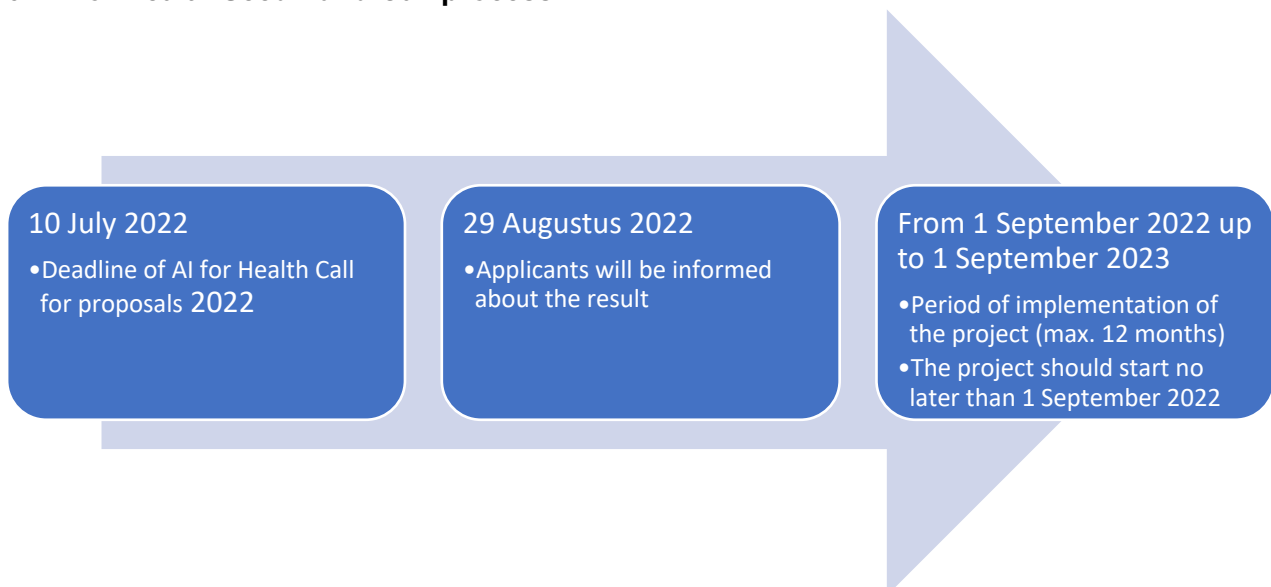o   Attending courses or conferences not related to the research project.

4. Eligibility criteria

1. At least 3 partners within the Alliance are involved in the proposal[2]. Given sufficient quality, higher priority will be given to proposals in which all 4 partners within the Alliance are involved.
2. The main applicants are tenured or tenure-track researchers (assistant professor, associate professor, professor) at the institutes of the Alliance, with a track record in research themes related to AI (or building a track record based on preliminary research), preferably with application in the health domain.
3. A researcher can be the main applicant for one proposal only and can be co-applicant in a maximum of two other proposals.
4. Excluded as main applicants for this call are: 1) main applicants who already received a grant from the EWUU in the preceding two years of this call; 2) members of the AI for Health working group (programme team and steering committee).
5. The proposal must adhere to the values of safety, privacy, security, trust, fairness, explainability, human-centered, and Open Science.
6. The maximum duration of a project is 12 months, and the start date is no later than 1 September 2022 and should end 1 September 2023.

5. What amount can be requested?

AI for Health has budgeted €750.000 for the period of 2022-2023 to be distributed in two rounds of Call for Proposals. The AI for Health working group reserves the right to decide on the proportion of this budget to be awarded in this round (deadline 10 July 2022), based on the number and quality of the submitted applications. The maximum amount that can be requested per application is €50K.

6. AI for Health Seed Fund Call process

10 July 2022
• Deadline of AI for Health Call for proposals 2022

29 Augustus 2022
• Applicants will be informed about the result

From 1 September 2022 up to 1 September 2023
• Period of implementation of the project (max. 12 months)
• The project should start no later than 1 September 2022

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[2] Researchers with an appointment at two EWUU institutions should explain that the work that they will be doing in the proposal falls naturally under the alliance partner from which they intend to participate in the proposal.

7. Submission guidelines and contact details

Applications can be submitted (using the enclosed application form and the budget form) to the liaison officer of your institute (see e-mail addresses below, under 'Contact'). The deadline of the submission is **10 July 2022 at 18:00hrs.** The applicants will be informed about the result of their applications on **29 August 2022** latest. Applications that do not meet the minimum requirements (eligibility criteria and submission requirements) will not be considered.

Contact
For questions about this call, please contact the liaison officer of your Institute:
- TU/e: Dasha Alexeeva (D.V.Alexeeva@tue.nl)
- WUR: Priska Prasetya (Priska.Prasetya@wur.nl)
- UU, UMCU: Laurence Frank (L.E.Frank@uu.nl)

8. Review procedure and criteria
The proposals will undergo a scientific review by the members of steering committee and, if applicable, will have to obtain approval of an Ethics Review Board at the institute of the main applicant.

The members of the steering committee of AI for Health will perform the scientific review of the proposals. If necessary, they may ask experts outside the working group to review the research proposals. Steering committee members who have a conflict of interest (for example, because of involvement of direct colleagues in a proposal) are exempted from decision-making. The applicants will be informed of the decision on 29 August 2022 latest.

Funding will be dispersed by the finance team directly following the notification to the applicants. If ethical approval is needed for a project, the amount can only be transferred after the applicants have handed over the approval of the Ethics Committee to the liaison officer of their institution. After this approval, the amount will be transferred, and the project can start (no later than 1 September 2022).

Review criteria
The proposals will be reviewed based on the following criteria:
1. The composition and qualifications of the team to complete the project. The extent to which the research team makes effective use of the complementary expertise of the different Alliance partners to form new collaborations and innovate in AI research. Higher priority will be given to proposals in which 4 Alliance partners are involved.
2. The extent to which the seed fund is used to work towards larger initiatives and/or a larger grant application in the field of AI for Health. Higher priority will be given to innovations that can provide matching funds, have the potential to have Intellectual Property (IP), and lead to value creation for the society.
3. The extent to which the seed fund is used to work towards breakthrough and accelerated application of new AI technology, focused on innovative solutions with applications of AI product, process or service, scientific quality, rigor and the ethical acceptability of the proposed approach and methods. The extent to which the proposal adheres to the values of safety, privacy, security, trust, fairness, explainability, human-centered, Open Science, and legal aspects such as GDPR, AI Act.
4. Innovativeness and creativity of the proposed AI project, balanced by the project's likelihood of success. Are the objectives achievable with clear deliverables and realistic within the given timeline and is the intended budget in balance with the intended result of the application?

5. If applicable, the feasibility of obtaining the approval of an Ethics Review Board by 1 September 2022.

Note that during the evaluation, the working group AI for Health can adjust proposed budgets if deemed reasonable, also to be able to fund additional proposals.

Requirements for awardees

Awardees must be willing to attend future AI for Health events and present their results there. By the project end date (12 months after receipt of the seed money), recipients must provide a final report of the research results including a financial account and a summary of the deliverables.

9. Organisation

The Steering committee AI for Health has the following members:
- Patricia Jaspers, TU/e
- Paul Merkus, TU/e
- Willem Jan Knibbe, WUR
- Guido Camps, WUR
- Peter van der Heijden, UU
- Remco Veltkamp, UU
- Carl Moons, UMC Utrecht
- Peter Luijten, UMC Utrecht

The Program Team AI for Health has the following members:

- Dasha Alexeeva, Liaison Officer, TU/e
- Priska Prasetya, Liaison Officer, WUR
- Laurence Frank, Liaison Officer, UU / UMC Utrecht