**Co-creating solutions for a Cirular Society**

***Seed funding Urban-Rural Circularity & Circular Safe Hospitals***

***Call for conference and proposals***

**Pressure cooker: 12 June 2025**

**Deadline proposals: 19 September 2025 5 pm.**

**Introduction**
The Institute for a Circular Society (i4CS) is excited to introduce the next round of Seed Funding. Are you a researcher at TU/e, WUR, UU or UMCU and passionate about advancing circular solutions through interdisciplinary and transdisciplinary collaboration and innovative research? Then this is your opportunity to team up with EWUU colleagues, develop collaborative projects and drive impact in the pursuit for a circular society.

**Aim and approach of the seed cal**l

With this seed call i4CS:

* initiates and supports innovative ideas and perspectives on developing circular systemic solutions for future proof regions and healthcare.
* facilitates and stimulates collaboration with (relevant) societal stakeholders.
* stimulates inter- and transdisciplinary collaboration including researchers of the four EWUU partners.

The approach for this call is to challenge researchers to address knowledge gaps encountered by societal partners. This way we aim to inspire academic research with societal impact and the potential to be transformative and drive systemic change towards a circular society.

The call covers five topics that were developed with the following societal partners:

1. *URC - Taking biobased materials to the next level:*
Metropoolregio Eindhoven, Municipality of Helmond, Municipality of Eindhoven and Nationaal Kenniscentrum Biobased bouw (NKBB).
2. *URC - Systemic change in the food system:*
Bean Deal
3. *CSH - Supporting healthcare professionals in making sustainable decisions:*
Milieu Platform Zorg (MPZ)
4. *CSH – Anchoring sustainability in Risk management and compliance:*
UMC Utrecht, department Risk & Compliance, supported by DIF and Procurement
5. *CSH - Harnessing AI to tackle pharmaceutical pollution of water:*
RIVM

Preliminary research questions for each of the five topics can be found in the Annex.

Researchers can apply for a seed fund **after attending the I4CS conference on the 12th of June** (see details below). These questions will be discussed and further developed during the morning part of the conference, together with the societal partners.

**Knowlegde gaps and questions from stakeholders**

**Conference – June 12, 2025**
Researchers from the four EWUU alliance universities are invited to develop transdisciplinary research proposals that contribute to resolving the knowledge gaps indicated below. To facilitate the development of relevant research proposals, i4CS organises a conference where researchers are facilitated to interact with representatives of the societal stakeholders, find other researchers from the four institutes to collaborate with and develop research ideas together and in coherence with the societal stakeholders involved.

Each of the five topics (see previous page) will be addressed in a separate sub-track in which:

* Societal stakeholders will present how they (aim to) contribute to a circular society, and provide insight into the knowledge gaps and (research) questions that they encounter in practice.
* Practitioners and researchers will explore and discuss the presented questions with the aim to supplement and improve them.
* The resulting research questions are then validated by the societal stakeholders and used as a starting point for the development of project ideas.
* Researchers from the different Alliance partners and societal stakeholders are invited to join forces, develop transdisciplinary project ideas and do some groundwork at the conference to develop their research proposal.

**Main conditions of the seed fund grant**

* Proposals for one of the seed-fund topics are eligible to receive a grant if:
	+ At least two researchers from the submitting team have participated in the conference sub-track related to their proposal.
	+ Scientists from different disciplines and from at least two EWUU institutions are involved in the project team. Involvement of more EWUU institutes and more disciplines will be rated higher in the evaluation.
	+ The proposal includes a plan on how the societal stakeholder(s) will be involved in the research project.
* The maximum budget per proposal is 40 k€, which means that a total of 6 grants can be awarded. The grant money may be used for:
	+ Hiring temporary researchers or other relevant staff.
	+ Extending research time of existing staff (i.e. financing substitution of teaching);
	+ Activities that are relevant to achieve the goal of the proposal such as organising dialogue or scenario sessions, network building, action research, citizen science and stakeholder events.
* The deadline for submission of proposals is 19 September 2025 before 5 pm. Between the conference and the deadline, a short update meeting will be planned with each team to discuss the progress, the collaboration with the societal partner and to provide further guidance where needed. Further details will be provided at the conference.

The proposals will be evaluated by a panel with members of at least three EWUU partners on added value of the collaboration, research quality and impact potential. We aim for a decision before 1 October 2025.

**For detailed call documents, please see**:

* Terms and Conditions
* Application form
* Template Budget

 Should you have any further questions at this point, please do not hesitate to contact:

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* Karina Neef, program manager Circular Safe Hospitals: k.a.neef-2@umcutrecht.nl

***Feel free to share this announcement with your colleagues.***

*This call is organised by the Institute for a Circular Society, an initiative of the alliance of Eindhoven University of Technology, Wageningen University & Research, Utrecht University, and the University Medical Centre Utrecht (EWUU). We aim to do groundbreaking research relevant for practical solutions contributing to a circular society.*

*Annex 1. Taking biobased materials to the next level:* *knowledge gaps and questions*
Partners: Metropoolregio Eindhoven, Municipality of Helmond, Municipality of Eindhoven and National knowledge centre for biobased building (NKBB)

The Netherlands has to urgently create new living areas and reduce carbon and nitrogen emissions. Biobased building offers clear potential to connect these ambitions. Fiber cultivation captures carbon and enables sustainable housing development. Additionally, fibre cultivation is seen as an interesting alternative revenue model for farmers who want to produce more sustainably.

In order to create a healthy market for biobased building materials, a system change must take place in both the construction and agricultural sectors. The Eindhoven Metropolitan region – a collaboration of 21 municipalities – developed a covenant and action plan “Biobased Building and Cultivation in the Eindhoven Metropolitan Area" aiming to encourage the cultivation of fibre crops and the production and application of biobased building materials in the region.

In partnership with the Eindhoven Metropolitan Region and the National Knowledge Center for Biobased Construction, we will dive into key questions around local fibre cultivation, the production of sustainable building materials and explore the role new economic, legal and governance models can play in advancing biobased construction to the next level.

**Legislation / business models / governance**

* How can existing and upcoming legislation (e.g. EPBD, ETS, CSRD, ESPR) and standards (e.g. BENG, MPG, Whole life Carbon) contribute to stimulating biobased construction, including the production of building materials from fibre crops?
* What bottlenecks are currently present in European and Dutch legislation and what would be solutions to overcome them?
* What effects can be expected from new legislation and standards (predominantly from the EU), for example on the business case of farmers who want to grow fibre crops?
* Where can national legislatures find discretion to implement their own national approach whilst implementing new European legislation related to circularity? And where can local governments find subsequent space to implement their own policy objectives in turn as well?
* What are important points of attention, and to what extent is it possible for governments to implement their own policy and set role models, when implementing new European legislation in national policy?
* There is a critical and wait-and-see attitude towards biobased construction - both among professionals in government who develop housing projects and in the construction chain, but also among future residents. Which interventions are possible and promising to change this attitude positively? How does this position relate to the above questions in legislation and regulations?

**Fibre cultivation**

* What role can municipalities play to stimulate fibre cultivation? Which public and private instruments can best be used for this and at what time?
* What are the possibilities for securing biobased materials/ fibre cultivation in the municipal lease policy?
* What experiences have been gained in the Netherlands in this area and what opportunities and bottlenecks have emerged?
* Is it possible to develop a guideline on fibre cultivation for the 21 MRE municipalities?
* How can fibre cultivation in the region be shaped in a way that is future-proof and fits within the transition to sustainable agriculture?
* Which type of cultivation is suitable in which type of area?
* How can fibre cultivation be stimulated in a context in which other tasks such as water and soil management, division of ridges/flanks/stream valleys, etc are (similarly/also) important? This question is also linked to the question below about spatial quality.
* What is the spatial impact and the impact on the living environment of the cultivation of fibre crops, taking into account that some fibre crops are very tall and produce a different image (e.g. for citizens living in the area) than current crops?

**Processing of fibre crops into building materials**

* How and on what scale (local, regional or larger) could the processing of fibre crops into building materials best be designed? Can digitalisation provide support in this?
* What are the opportunities for a processing facility (regional/ZO-Nld scale)?
* What role can the local industry in the Eindhoven metropolitan region play in an international building materials market?
* What opportunities or obstacles are there for municipalities and/or the region to make the production chain more regional? How does this discussion about scale relate to legal and governance issues as mentioned earlier?

*Annex 2. Systemic change in the food system:* *knowledge gaps and questions*
Partner: Bean Deal

There is broad consensus on the need to shift towards a more sustainable and healthier diet—one that includes fewer animal-based and more plant-based proteins.

Across the food system, we see inspiring initiatives: from network organizations driving change through knowledge sharing and advocacy, to farmers experimenting with new crops and innovative business models like community-based agriculture.

Yet despite these efforts, the transition remains painfully slow—constrained by economic, legal, and governance systems that uphold the current food environment through mechanisms such as market lock-ins and entrenched dietary patterns. In this seedcall, we’ll join forces with several pioneers in the food system to explore what lock-ins exist, and what is needed to overcome these and explore how to drive systemic change toward a more sustainable food future.

**Digital tooling for decision support**

Bean Deal and several other actors in the food system aim to build a new value-driven and transparent chain for vegetable proteins from Dutch soil, in which the added value of these products is expressed in a future-proof price. There is a need for concrete roadmaps, in which it is clear who can and must take which steps to realize the above ambition and objective.

* There are various bottom-up initiatives that focus on sustainable production, processing and purchasing of vegetable proteins. What do we learn from these case (s) about concrete steps / measures that are possible within the current context and which systemic changes are necessary (economic, legal, governance) to transition towards a sustainable and circular food system?
* Is it possible, with the information that is currently available, to create (a) concrete roadmap(s) that clearly show who should take which step and when?
* In what way can digital innovations such as (co-participation) support tools and AI support the design of (parts of) such a roadmap?
* There are many different factors and developments that influence crop choice - can digital (multi-criteria) decision support tools support farmers to arrive at a good crop choice based on these factors and developments?
* How can the public sector, as a stakeholder in this transition, effectively use these roadmaps in their purchasing activities on the market (e.g. with regard to purchasing planning, market research, and design of tender procedures)?

**Guaranteeing earning capacity**

To safequard the earning capacity of Dutch farmers who (want to) produce vegetable proteins in a sustainable manner, true value and/or true pricing are being considered so that farmers can be rewarded for the (extra) added value they deliver if they focus on sustainable, nature-inclusive cultivation of leguminous plants.

A *True Value Approach* creates incentives that allow entrepreneurs to include broad costs and revenues of agriculture in their decisions. True pricing means that these broad costs and revenues are processed in the price of the product itself. Questions related to these concepts and their added value are:

* Is it possible to develop a good business case for the sustainable cultivation of leguminous plants in the Netherlands in the current context and international market?
* What are the barriers and opportunities for applying true pricing in the pricing of Dutch legumes in the context of the international market? What concrete steps can be taken to give substance to true pricing?
* Does a broader approach focused on true value offer promising ways to safeguard the earning capacity of Dutch producers of sustainably grown vegetable proteins? What could that look like in concrete terms?
* What / which data are needed for a solid substantiation and monitoring of the true value / the added social value of the (sustainable, nature-inclusive) cultivation of legumes?
* What role can the law play (or should it play) with regard to true pricing to ensure, on the one hand, that there is sufficient legal space for the parties involved to effectively implement true pricing methodologies, while on the other hand there are also sufficient guarantees for a just transition (minimum lower limit, equality, etc.)?

*Annex 3. CSH - Supporting healthcare professionals in making sustainable decisions: knowledge gaps and questions*
Partner: Milieuplatform Zorg (MPZ)

Dutch healthcare uses vast amounts of materials daily, most of which are incinerated, causing emissions and resource depletion. Care professionals seeking sustainable choices face practical and knowledge barriers. Procurement and clinical decisions rarely fully align with sustainability, and guidance on circular alternatives is often missing. With growing sustainability targets, accessible tools are urgently needed to support evidence-based, environmentally responsible decisions and promote impactful alternatives in daily practice.

Building blocks of this call are objectives ad guidelines that already exist, such as the Green Deal Sustainable Healthcare 3.0 (especially pillar 4, coordinated by Milieu Platform Zorg), the PROMEZA tool and the NFU shortlist of medical disposables.

The Green Deal Sustainable Healthcare 3.0 sets a clear goal: reduce raw material use in healthcare

by 50% by 2030. Pillar 4, coordinated by MPZ, focuses on increasing circularity in medical processes and procurement.

The PROMEZA tool—developed by the NFU working group on circular and resource-efficient care—supports this ambition. It helps professionals analyse the material footprint of a specific procedure (e.g. cataract surgery) by weighing used products and entering data into a standardized form. With the results you can determine where reductions, reuse, or substitutions are needed ad possible.

The NFU Medical Disposables Shortlist complements this by identifying 22 high-impact disposable products and advises for the short term to increase sustainability towards circularity using the R-ladder.

**Niche and research opportunity: from insights to actionable choices**

This project aims to fill a key gap: supporting care professionals and procurement staff in quickly and confidently choosing the most circular option from available alternatives.

The necessary information and choices can possibly be embedded in a decision-support tool, such as a decision tree, scoring matrix, e-learning modules or interface integrated with procurement systems.

Research questions:

* Which decision factors are most relevant for comparing the impact of reusable, recyclable and disposable care products? Which weighing factors should these factors have looking at the targets from e.g. the Green Deal Sustainable Healthcare 3.0?
* Can these decision factors be translated into a usable tool for sustainability coordinators, healthcare professionals and procurement officers?
* What (e-)learning and/or educational tools can be set-up to fill the knowledge gap useful in decision making?

*Annex 4. CSH – Anchoring sustainability in risk management & compliance: knowledge gaps and questions*
Partner: UMC Utrecht, department Risk and Compliance, supported by DIF and Procurement

Healthcare relies on thousands of materials, many of which are not sustainable and which are single use. Besides, many of the raw materials needed to produce these materials and also the materials that equipment incorporate are becoming increasingly scarce or are even classified as ‘critical’. Therewith, the pressure grows to make more strategic choices about material use to ensure high-quality, resilient care for generations to come.

Acquiring detailed information, such as data on product composition, is crucial for assessing progress toward sustainability objectives. By integrating it into core systems like Enterprise Resource Planning (ERP), decisions can automatically be guided by standards like the upcoming Corporate Sustainability Reporting Directive (CSRD).

The UMC Utrecht is on the verge of implementing a new ERP system. This ERP system has a lot of potential, both regarding the integration of goals related to sustainability and circularity, as well as information to anticipate and minimize risks. With this call, we aim to support the integration of risk strategies related to sustainability and circularity in this ERP system.

We invite healthcare professionals and researchers across disciplines – such as health economics, environmental science, software and data science, organizational dynamics, health sciences, sustainability governance, and transition studies – to co-create innovative frameworks and solutions that enhance risk management and build resilience in healthcare.

This brings us to the following main question and sub-questions:

**How should an organisation structure its risk management and data streams in order to meet its sustainability objectives in the areas of procurement and reporting?**

Sub-questions:

* What procurement and reporting objectives do healthcare organizations, including UMC Utrecht, have regarding sustainability and circularity?
* What risks (e.g. related to critical or scarce materials) impact achieving these objectives?
* How should risk management concerning sustainability and circularity be structured in response to these risks?
* What role can risk management play in the systems used, for example in an ERP system?
* What information (such as data on product composition) is needed to monitor the extent to which the aforementioned sustainability and circularity objectives are being achieved?

The resulting product of the above could be a risk matrix that can be used within the UMC Utrecht and/or other healthcare organisations.

*Annex 5. CSH - Harnessing AI to tackle pharmaceutical pollution of water: knowlegde gaps and questions*

Parter: RIVM

Clean water is essential for people and nature as a basis for health, life and sustainability. The importance of water protection is recorded in writing by the European Framework Water. It has the goal to secure and restore healthy and clean surface water and ground water.

Medicins have the primary goal of protecting and improving health of human beings. Unfortunately, medicins can enter the environment via various routes (e.g. via urine or wrongful disposure). All in all, this results in an increasing environmental problem for both ecology as well as specifically clean drinking water.

Current insights in the environmental impact of pharmaceuticals are minimal. This results in harmful effects and risks being only partly indicated. This is also because judgement on the environmental risks of pharmaceuticals upon admission is only obligatory as of 2006. For pharmaceuticals admitted before 2006 (the so called ‘legacy pharmaceuticals’), a file on potential environmental harm is lacking. Next to this, only a limited amount of pharmaceuticals is being monitored by water administrators.

The use of AI provides chances to increase the predictive value of the environmental impact of pharmaceuticals in water. This can provide very valuable information for the development of risk management strategies and policies protecting health of nature as well as human beings. These risk strategies or their measures could also imply a list of pharmaceuticals with the potential to replace other pharmaceuticals with a higher impact.

**Knowledge gaps and research questions**

The research questions are geared towards the legacy pharmaceuticals and aimed at gaining more insight in the use, the emissions and other characteristics determining the exposure and risk level of these pharmaceuticals in the environment and on organisms. Together, these characteristics influence the risk these pharmaceuticals pose on animals and ecosystems in the environment:

***How can AI serve as a predictor for the environmental impact of the ‘legacy’ pharmaceuticals?***

To be able to answer this main question, the knowledge gaps can be further divided in different aspects in the user chain of pharmaceuticals. From this division, the research questions below have been formulated.

* Use and emission: Which pharmaceuticals will increase and decrease in use in the future? Can prioritization be used in data development regarding use and emissions?
* Metabolism: What patterns are there in metabolism and the excretion of pharmaceuticals and their metabolites?
* Decomposition in wastewater treatment plants: to what extend are the various pharmaceuticals being decomposed by processes of wastewater treatment or filtering? Is there lawfulness to be distinguished, to optimize the decomposition of pharmaceuticals at the wastewater plants from this lawfulness?
* Impact on life in water: What are the effects of pharmaceuticals on aquatic organisms and ecosystems? What types of substances dominate the effects? To what extend is the predictive effect of AI determined by the working mechanisms of the pharmaceuticals?
* Water quality: How can water operators determine the water quality with more precision using AI? Are there certain water bodies which are strongly loaded, and if so, by what substances or group of substances are these loaded?