

HIGHLIGHTS OF 2023

alliance TU/e, WUR, UU, UMC Utrecht | [EWUU.nl](https://www.ewuu.nl)

- Eindhoven University of Technology, Wageningen University & Research, Utrecht University and University Medical Centre Utrecht are complementary in knowledge and talent and work together to contribute to societal transitions

OUR ALLIANCE

CROSSING BOUNDARIES FOR A BETTER FUTURE

Future generations face unprecedented challenges: climate change, resource depletion and a widening gap in society – between rich and poor, highly educated and less educated. Science and technology play a key role in creating the future we want for our planet and its inhabitants. In order to speed up progress we need to bring disciplinary fields together and to join forces. Together we use our wide range of expertise in research and education, to contribute to major social transitions.

Eindhoven University of Technology, Wageningen University & Research, Utrecht University and UMC Utrecht are working together in the [alliance TU/e, WUR, UU, UMC Utrecht \(EWUU\)](#) since 2019 to tackle pressing social challenges and realise sustainable transitions to create a better future.

This highlight report gives an overview of the main activities of the alliance in 2023.



ANNUAL CONFERENCE

At our annual conference 2023 [Crossing Boundaries for a Healthy and Sustainable Future](#) 300 people came together to connect and collaborate.





THREE NEW DIRECTORS

To continue our pace of growth we have appointed two [Scientific Directors](#) and a [Director EWUU Education](#) for our three main focus areas: Preventive Health, Circular Society and Education. They serve as ambassadors for the partnership and play a crucial role in bringing the institutions and disciplines together.


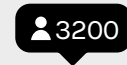
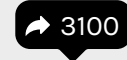


ALLIANCE IN NUMBERS




EDUCATION

-  440 total courses are offered for student mobility
-  5 challenges for students to participate in
-  188 students follow courses at a partner institute

OUTREACH

-  1250 subscribers to newsletter
-  3200 followers on social media
-  3100 unique monthly visitors on ewuu.nl

RESEARCH

-  16 seed fund calls
-  90 seed funded projects
-  560 researchers participate in our projects

COMMUNITY

-  300 participants in our annual conference
-  450 participants in other alliance events
-  63 events and activities
-  14 online lunch lectures with 35-85 participants each

SUMMER SCHOOL INNER DEVELOPMENT GOALS

During this [Summer school](#) in Utrecht the Inner Development Goals were used as guiding framework for personal development towards a sustainable future. Aiming to develop the inner capacity to deal with our increasingly complex environment.

OUR EDUCATION

BROADENING HORIZONS

We focus on [expanding students' horizons](#) by enabling them to combine the knowledge from their disciplines with a wide range of interdisciplinary and transdisciplinary skills. We facilitate inter-institutional education and we collaborate in professional education and educational research. This allows students and learners to cooperate and communicate in a complex and diverse context.



CHALLENGES FOR STUDENTS

In the Challenge Based Learning concept learners work together in a community of peers, teachers and experts to tackle real-world problems. In 2023 [five challenges](#) were organised, like the Summer school [The Regenerative City](#), on how to develop cities and countryside to support all life. In this year the [DaVinci Master's programme](#) ran for the first time: a programme for students that work on real-life sustainability related projects in interdisciplinary teams.

CONTINUING EDUCATION

The course [Didactics Continuing Education](#) supports lecturers in the development of this type of education and by learning from each other. The course [Improving nutrition and physical activity for cancer patients](#) used the latest insights from research and turned it into practice-based solutions. The course was offered to healthcare professionals.



STUDENT MOBILITY

The platform [EduXchange](#) that facilitates student course registration was updated in 2023: more courses were offered, improvements such as better administrative alignment were made.

CBL PLATFORM

The [Challenge Based Learning Platform](#) was launched to provide tools to teachers and stakeholders to organise and design these courses. The platform is designed to guide them through an engaging learning experience.

“There is a demand for people who possess the ability to address complex and dynamic challenges by transcending disciplinary boundaries.”

Ines Lopez Arteaga, Director EWUU Education

RESEARCH PROJECTS

The project [Alternatives to practicals and field work](#) was completed with good results. [Three research projects](#) started this year, ranging from looking at the impact of interdisciplinary and transdisciplinary teamwork, to students' self-regulated learning capabilities, and using virtual reality simulations to enhance innovative teaching practices.



OUR RESEARCH

PREVENTIVE HEALTH

Our [institute 4 Preventive Health \(i4PH\)](#) focuses on four research themes: **Healthy Start, Preserving Health, Health@Home and Living with Disease**. It aims to contribute to the goal of all Dutch people living at least five years longer in good health and reducing health disparities between the lowest and highest socio-economic groups.



Watch the new video [Introduction to the institute 4 Preventive Health](#).

“The pressure on healthcare is one of the biggest societal challenges we face. We need to look at the entire system and work together from a variety of disciplines.”

Roel Vermeulen, Scientific EWUU Director

CONFERENCE

Gathering over 200 attendees and featuring more than 30 speakers, the [Preventive Health Conference 2023](#) was a great success. With plenary keynote sessions, interactive breakout sessions, and network opportunities, the conference proved to be a dynamic transdisciplinary hub of knowledge, collaboration, and inspiration.



COMBINED SEED FUNDING

43 collaborating researchers received 260.000 euros of [seed funding](#) for cross-disciplinary collaborations within seven projects, including five i4PH-projects. The aim of the funding is to drive forward the development and application of Artificial Intelligence to the benefit of society.

AGRIFOOD GRANT

With the TKI AgriFood grant, the project [Personalised dietary advice for human and planetary health](#) has a budget of 432.000 euros. This transdisciplinary project investigates how dietary advice can be personalised for improved personal health and well-being.

NWO FUNDING

The [Healthy LiFestyle for low liTerate teenagers \(LIFTS\)](#) project was awarded 1.4 million euros from NWO-KIC. The research focuses on promoting a sustainable healthy lifestyle among low-literate teenagers.

LIFELONG LEARNING

A healthy lifestyle improves the quality of life during and after cancer treatment. In November the Lifelong Learning course on [Cancer, nutrition and exercise](#) took place, featuring lectures by Aarnout Brombacher (TU/e), Ellen Kampman (WUR) and Anne May (UMC Utrecht).

THEMATIC SEED FUNDING

We have awarded 150.000 euros to [five seed projects](#) for innovative and interdisciplinary research in the field of preventive health. The call was aimed at *Optimizing Functioning and Self-Efficacy Across Various Life Stages*.



OUR RESEARCH

CIRCULAR SOCIETY

Our **institute 4 a Circular Society (i4CS)** is dedicated to expediting the transition to a circular society. We do so by inspiring with knowledge, innovations for circular systems and by providing effective tools for circular solutions. i4CS focuses on two research themes: **Circular Safe Hospitals (CSH)** and **Urban-Rural Circularity (URC)**.



REWIRE

The project **REWIRE** has secured funding in the *Knowledge and Innovation Covenant's 'Collaboration in mission-driven innovation'* call. It aims to develop, from an ecosystem perspective, practically applicable methods that support collaborative activities oriented towards finding new business models and designing appropriate policy frameworks.

COMBINED SEED FUNDING

43 collaborating researchers received 260.000 euros in total of **seed funding** for cross- and transdisciplinary collaborations within seven projects, including two i4CS projects *TakePart: An AI-driven Digital Twin Platform for Circular Green Infrastructure* and *Learning-based Design and Control of Green energy System for Vertical Farm Production*.



ESCH-R

ESCH-R has been awarded 5 million euros by the Dutch Research Council. This funding will enable our researchers to develop circular strategies aimed at minimizing the usage of disposable products in hospitals.

"The urgency of transitioning from a linear to a sustainable circular society cannot be overstated."

Huub Rijnaarts, Scientific EWUU Director

HORIZON EUROPE GRANT

The project **NATURESCAPES** was awarded a 6.5 million euros Horizon Europe grant: how can Nature Based Solutions be more effectively linked to promote sustainable transformations and positive changes in the living environment.



THEMATIC SEED FUNDING

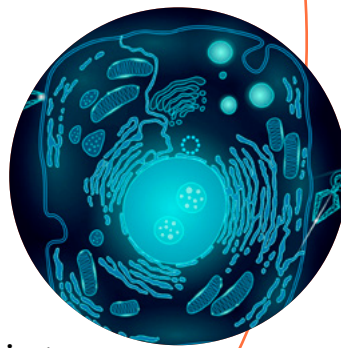
Project **VITAMIN** has received a research seed grant under Circular Safe Hospital theme. **Four grants were awarded** under the Urban-Rural Circularity theme: *C3RN, CE-Food Planner*, a project on *re-inventing wastewater* and one on *using landscape-thinking to close loops regionally*.



OUR RESEARCH

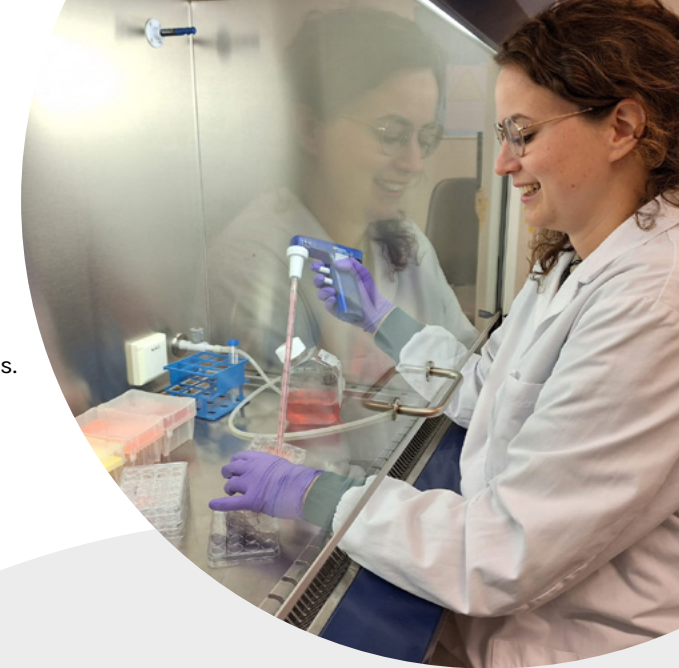
LIVING TECHNOLOGIES

Our [Centre for Living Technologies](#) (CLT) aims to develop bio-based technologies by introducing new functionalities onto living cells and explore how these technologies can be used to improve the health of people, animals and the environment. The programme builds on existing strengths in life science research of our four institutions.



BIOTECHNOLOGY TEACHING HUB

CLT members within Utrecht University established a Biotechnology Teaching Hub to accommodate small scale research projects for groups up to 20 students. The hub is embedded within the CLT Utrecht Nanobody and Cellular Engineering facilities.



Meet Rosie
The [new robotic Screening lab assistant](#) for Living Technologies.



EMBO APPOINTMENT

[Lukas Kapitein](#), member of the steering group Living Technologies, was appointed as a member of the European Molecular Biology Organization (EMBO).

RECOGNITION AND GRANTS

[Francesca Grisoni](#) has been awarded the prestigious *FEBS* (Federation of European Biochemical Societies) Excellence Award. The project [hDMT INFRA StemCells](#) was awarded 13.5 million euros from the NWO National Roadmap for Large-Scale Research Infrastructure. Funding was also granted to the *TKIAI3P* project and the *TKI Genmap* project.

EVENTS

Living Technologies was part of the [IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology](#) and partnered the symposium *Expanding horizons: The convergence of academia and industry in synthetic biology in the Netherlands* with SynBioNL.

DUTCH IGEM MEET

We organised the [Dutch iGEM](#) symposium on 7 July in Utrecht. The meeting brought together over 50 students from various universities in the Netherlands and Belgium. The [iGEM competition](#) offers students an opportunity to apply their knowledge and push the boundaries of synthetic biology.



OUR RESEARCH

ARTIFICIAL INTELLIGENCE

Our [Artificial Intelligence programme](#) supports the realisation of trustworthy and innovative AI for the benefit of society. We do this by making use of multidisciplinary and complementary expertise of the four institutions, inspired by societal challenges in circularity and preventive health.



AI TOGETHER WITH PATIENTS

Our programme financially supports the Value Alignment in Medical AI [ELSA Lab](#) which obtained the AiNED ELSA lab status in 2023. This lab explores how medical AI can be aligned with the values and needs of patients and stakeholders, in order to truly add value to reliable AI solutions for health and healthcare.



RETURN ON INVESTMENT

The AI programme invested 700.000 euros in 17 seed money projects. We are very proud to report that three of these seed grant projects have secured a total return on investment of 2.5 million euros.



LAUNCH AI HUB

In January we officially launched the [Alliance Artificial Intelligence Hub](#) to enhance AI expertise within our alliance, aiming for return on investment from national grants and societal co-funding. The Alliance AI-Hub focuses on scientific discovery through trustworthy AI, applying developed knowledge in preventive health and circular society.



PERSONALISED DIETARY ADVICE

The project [Personalised dietary advice for human and planetary health](#), that received seed funding from the Artificial Intelligence programme, has been granted 432.000 euros by AgriFood. This project uses digital twin technology for personalised dietary advice to promote healthier and more sustainable diets.

OUR RESEARCH

UNUSUAL COLLABORATIONS

Our [Centre for Unusual Collaborations \(CUCo\)](#) supports a diverse group of young academics to come together and be well equipped with resources and capacities for working in unusual interdisciplinary and transdisciplinary collaborations to address the most pressing challenges of the age. Stimulating unexpected and out-of-the-box research is an essential aspect of the centre. Learning and reflection on the process of collaboration is key as well.



Watch our [video](#) and get an insightful overview of the mission and values of CUCo.

DOCUMENTARY

In the CUCo documentary *1+1=3: Overcoming the barriers of interdisciplinary research* the Unusual Collaboration team *Structures of Strength* is followed. The documentary takes viewers on a journey, to explore the challenges of interdisciplinary collaboration and discovering ways to overcome these barriers. Watch the [trailer](#) or the [full documentary](#).



UNUSUAL COLLABORATION GRANTS

The project *Playing with the Trouble* is crafting playful tools like card decks to foster transdisciplinary collaboration and navigate diverse perspectives, aiming to create a travelling library for transformative play to tackle urgent societal challenges. Together with 6 other [projects](#), it received an [Unusual Collaborations grant](#). In total 71 mid-career academics were involved.

SPARK GRANTS

Spark grants provide initial financial support to facilitate unusual collaborations aimed at addressing societal challenges, enabling teams to explore and develop innovative ideas for potential project applications.

[Four new Spark teams](#) kicked off and ongoing Spark teams concluded their activities with 21 mid-career academics involved and 35 participants in four runs of the Spark training.



TOOLKIT

The [toolkit for a collaborative process](#) offers a set of methods, approaches, people and likeminded initiatives that facilitate working across boundaries: across ideas, disciplines, institutes, types of knowledge and personalities.

TENTACULAR FUTURE FESTIVAL

CUCo (co)organised and contributed to 15 events, such as the [Tentacular Future Festival](#). The events and sessions are characterised by their potential to stir up debate, as well as by their contribution to understanding unusual interdisciplinary research.



OUR ORGANISATION

ORGANISATION

BOARD

Members of the Executive Boards of TU/e, WUR, UU and UMC Utrecht form [the Board](#) of our EWUU alliance. The General Board involves all members of the Executive Boards of our four partner institutions.

The deans of TU/e and UU, the managing directors and deans of WUR and the chairs of the strategic themes of UMC Utrecht come together in the General Assembly.

EWUU OFFICE

The Board of the EWUU alliance receives expertise-related support from the alliance coordinator and the members of the Core Team. It receives organisational support from the Programme Team.

STEERING COMMITTEES

The six initiatives within research and education are led by steering committees, consisting of representatives of our four partner institutions.

CONTACT

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CHALLENGING FUTURE GENERATIONS

In the EWUU Alliance, Eindhoven University of Technology, Wageningen University & Research, Utrecht University and University Medical Centre Utrecht connect their scientific knowledge in research and education. The four institutions cooperate on a cross-disciplinary basis in the areas in which they complement each other. The motto of EWUU is 'Challenging Future Generations'. Using an unconventional approach, the alliance challenges new generations of researchers, tutors and students to work together, across disciplines, without imposing limits in advance. It focuses on research results with an impact on society.