



Connecting Science and Society



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Appreciate 'valorisation' efforts

UMC Utrecht offers researchers a so-called 'valorisation track' where they are not evaluated solely on publications, but also on connections with industry, or other possible 'users' of research findings. To obtain the valorisation track, researchers must prove external interest in their research. This evidence may be patent filings but also industry grants.

Brain researcher Bas Neggers, PhD, is one of the first two 'valorisation' associate professors in the UMC Utrecht. He started a spinoff company around the 'neuronavigator', a device that helps locate brain functions. "Often, promising devices don't progress beyond a prototype. The valorisation track helps researchers to translate their findings to products."

2

Involve society

Societal issues guide research in the UMC Utrecht. Patient organizations are involved in many research programs. They help to determine the direction of scientific research and the organization of healthcare. This shift from purely scientific considerations led to more patient-oriented research. The Personalized Cancer Care program established a patient council that advises doctors and researchers. There are also regular meetings between patients, their relatives, and UMC Utrecht doctors and nurses.

A patient representative says: "I really appreciate this initiative, it shows the UMC Utrecht means business with patient participation. We are not discussing the color on the walls, we're talking about healthcare organization. Every meeting supports the idea that the UMC Utrecht really cares about patient views. The ingredients that make this work? Authentic concern and honest communication."

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Taking a new approach on education

UMC Utrecht develops new master tracks together with other universities, along the lines of the six research programs. The Selective Utrecht Medical Master program (SUMMA) trains doctors to link clinical practice and scientific innovations. In the SUMMA Tech track medical doctors gain extra understanding of new technological developments in for example imaging, minimally invasive surgery and regenerative medicine. This track is a collaborative effort of UMC Utrecht, Utrecht University and Eindhoven University of Technology.

Also, UMC Utrecht students in regenerative medicine can participate in a joint program with the Queensland University of Technology, Brisbane, Australia, and obtain a PhD at both institutions.

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And the winner is...

All health professionals in UMC Utrecht are invited to participate in a contest for innovative ideas that improve health care: the Ureka Mega Challenge. The contestant with the best and most promising idea receives financial support to make it happen.

The winner of the first edition, biomedical engineer Thijmen Struik, devised a clever hinge that enables patients to bend their knee when they undergo 'knee distraction', an arthroscopy treatment. "Participating in the Ureka Mega Challenge and bringing your idea in the limelight, forces you to try and bring it to fruition. This way, a good idea doesn't end up being just a good idea."

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Looking further

UMC Utrecht dares to invest in long-term, high-risk research. For example, in the Center for Image-guided Oncological Interventions, together with Philips Healthcare and Elekta, we develop a new machine to simultaneously apply radiotherapy and visualize tumors. In this Center we're also testing methods to attack cancer with locally applied radioactive microspheres, or to treat tumors with ultrasound.

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PhD not always needed

The Children's hospital at the UMC Utrecht recruits future pediatricians based on proven clinical talent plus excellence in some other field. Obtaining a PhD is not always necessary, since it doesn't make you a better doctor. For a future clinician/researcher obtaining a PhD makes sense. It shows one can independently and creatively organize a research project. But for clinicians moving into management or education different talents are needed, explain Prof. Edward Nieuwenhuis and Joost Frenkel PhD, who head the pediatric residency program

"Many medical specialists never refer to their PhD again once they start working in a non-academic hospital, as most will. We feel the UMC Utrecht has taken a brave step in dropping this requirement."

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Evaluate research the new way

An international committee, aided by societal stakeholders, evaluates the quality of UMC Utrecht research. Bibliometric data are available, but the evaluation starts with a self-assessment of all six UMC Utrecht research programs. In this self-assessment the programs explain how they are committed to solving societal issues and which societal stakeholders they have involved.

"Obviously, we asked internationally renowned researchers to critically analyze our research", explains Susanne van Weelden, PhD, head of the UMC Utrecht Research Office. "But in addition we asked representatives of amongst others the Dutch Heart Foundation and the Lung Fund, two charity funds, to voice their opinion on our research objectives. It greatly helps determining long-term goals."

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Research in large, multidisciplinary programs

UMC Utrecht is organized in six programs, each focused on a limited number of diseases. These multidisciplinary programs are starting points for shaping research and education. Strategic investments support the programs. The six programs are Personalized Cancer Care, Circulatory Health, Regenerative Medicine & Stem Cells, Infection & Immunity, Child Health and Brain.

"In the Brain program, I connected my research on brain connectivity to the genetic and clinical research of the amyotrophic lateral sclerosis (ALS) group", says neurobiologist Prof. Jeroen Pasterkamp. "At the cross section of these fields we're now trying to understand what goes wrong in the brain cells of ALS patients and how to fix these defects."



