**Engineers and doctors working together could revolutionize a range of surgical procedures**

A team of 3D designers, engineers, and doctors from Pécs is working on surgical procedures that combine medical and engineering approaches and methodologies to make life easier for both patients and medical staff, playing a key role in the creation of a new type of breast correction surgery. We talked to Balázs Gasz dr., the cardiac surgeon and head of the clinical working group of the 3D Center of the UP, about the huge potential of this new approach, which will be an important part of the Biomedical Engineering course starting in the autumn.

In addition to the success of the procedure, Balázs Gasz considers the concept of the intervention and its potential to be one of the most important weapons in the arsenal of the novel thoracic correction surgery developed and performed in Pécs. As we have reported, the essence of the new surgical procedure led by Zalán Szántó, a thoracic surgeon, is that a completely personalized prosthesis is inserted into the chest of patients with funnel chest, which on the one hand significantly shortens the surgical procedure by a third, thus reducing the chance of potential complications, and on the other hand, careful engineering design and execution minimizes the chances of error. To achieve this, the surgical procedure had to be rethought from the ground up, and coordination between seemingly distant disciplines had to be achieved.

However, high-tech capabilities alone are not worth much, says Balázs Gasz: the human factor is critical.

The working group's cross-disciplinary approach and the collaboration of experts who are bravely stepping out of their own field and integrating new perspectives could be a natural home for the Biomedical Engineering course to be launched at the University of Pécs in September, where new generations of professionals integrating health and engineering solutions will grow up.

The combination of new approaches and technological breakthroughs could transform the whole field of surgery, making a whole range of procedures shorter, less risky, and more cost-effective. And the working group, trained in successful collaborations, is constantly looking for new opportunities.

The full interview is available at: [PTE ÁOK · Hírek · A szívsebész, aki beszél mérnökül](https://aok.pte.hu/hu/hirek/hir/13489)