



University of Pécs
1367



NeuroFlex

Flexible innovation for precise neurosurgery.



CHALLENGE

Microsurgical procedures, especially in neurosurgery, require continuous visibility and uninterrupted precision, yet frequent instrument exchanges disrupt surgical workflow. Traditional tools often need to be swapped or passed between the surgeon and assistant, delaying responses during bleeding and increasing procedural risk.

SOLUTION

To overcome workflow inefficiencies in microsurgery, we have developed innovative, multifunctional surgical instruments that combine several essential functions into a single tool, reducing the need for instrument exchanges.

INVESTMENT HOOK

Longer neurosurgical procedures are associated with increased infection risk, greater anesthesia exposure and related complications, and higher hospital costs. Each additional hour of craniotomy is associated with a 34% increase in the relative risk of surgical site infection, while operating room costs range from approximately €9–20 per minute, depending on the setting. In complex procedures, dozens of instrument exchanges may accumulate to an estimated 15–20 minutes of non-operative time.

WE ARE SEEKING FOR

We are seeking strategic partners - including investors, product development collaborators, and local manufacturing partners - to accelerate market entry and support scale-up.

Our goal is to secure USD 100,000 in seed funding for our initial investment round.

THE TEAM

Dr. Dominik Iván
MD – Neurosurgeon,
Department of Neurosurgery,
University of Pécs

Dr. Péter Maróti
MD, PhD, med. habil. –
Head of 3D Printing and
Visualization, University
of Pécs

Microsurgical instruments

Neurosurgical operating room



TRL 3

Microsurgical
Instruments
Market USD 229
million in 2025 at
6.7% CAGR

The first patent-
related filing has
already been
submitted

Manufacturing
partner

Regulated
market

B2B and B2C
Sales Models



dr. Nagyréti József
+36303138965
nagyrreti.jozsef@pte.hu

