# **Department of Urology**

The Department of Urology of Faculty of Medicine in Hradec Kralove and the the University Hospital Hradec Kralove is a top-tier facility providing comprehensive urological care at the highest level. Our department is equipped with state-of-the-art da Vinci robotic systems, enabling us to perform the most advanced minimally invasive oncological and reconstructive surgeries.

In collaboration with the Department od Cardiac Surgery, we specialize in the removal of kidney tumors that extend into the inferior vena cava or even the heart. Our Interdisciplinary Transplant Center, established in 1961 when the first kidney transplant in Czechoslovakia was performed here, continues this tradition and offers exceptional kidney transplant care. Our goal is to provide patients with the best possible care using the latest technologies and expertise.

## Main research topics

- · Open, laparoscopic, and robotic oncological and reconstructive surgeries
- · Analysis of toxins in kidney tumors to explain the highest incidence of kidney tumors in the world in the Czech Republic
- Kidney transplantation from living and deceased donors

## Scientific research groups

- Group evaluating toxins in kidney tumors collaboration with University of Hradec Kralove
- An antomic study evaluating the morphology of the pelvic floor and prostatic apex to improve functional outcomes of radical prostatectomy
- · Study of endothelial glycocalyx in transplanted kidneys

## **Equipment**

· daVinci Xi Robotic Systems

## Cooperation

- Collaboration with University of Hradec Kralove toxins in kidney tumors
- Department of Anatomy morphology of the prostate apex and pelvic floor
- Department of Nephrology kidney transplants

## International cooperation

- Robotic radical prostatectomy collaboration with Martini Clinic Hamburg (University of Hamburg)
- Robotic Oncology Surgery University of Stuttgard

### **Achievements**

Ranked among the top 10 centres in the EU in the independent evaluation of Robotic Operations 2021