

- 1. Application of microencapsulation in medical and pharmaceutical industry**
SUPERVISOR: Dr hab. Anna Bajek, prof. UMK, Department of Tissue Engineering, Chair of Urology, Faculty of Medicine
- 2. Assessment of population invariant natural killer T (iNKT) cells by flow cytometry method**
SUPERVISOR: Dr Lidia Gackowska, Department of Immunology, Faculty of Pharmacy
- 3. Phenotypic and functional characteristics of mucosal associated invariant T cells – MAITs in patients with civilization diseases (hypertension, cardiac diseases)**
SUPERVISOR: Dr Małgorzata Wiese-Szadkowska, Department of Immunology, Faculty of Pharmacy
- 4. The quality evaluation and comparative analysis of selected drug dosage forms available in the Polish pharmaceutical market**
SUPERVISOR: Dr Joanna Ronowicz, Department of Inorganic and Analytical Chemistry, Faculty of Pharmacy
- 5. The relationship between the expression of STING adaptor protein and the profile of local and systemic immune responses to *H. pylori* infection**
SUPERVISOR: Dr Anna Helmin-Basa, Department of Immunology, Faculty of Pharmacy
- 6. Phenotypic and functional characteristics of peripheral blood iNKT and MAIT cells in a group of pediatric patients with type 1 diabetes in relation to the presence of anti-*Mycobacterium avium* syp. *Paratuberculosis* antibodies**
SUPERVISOR: Dr Izabela Kubiszewska, Department of Immunology, Faculty of Pharmacy
- 7. Solid phase microextraction in bioanalysis**
SUPERVISOR: Dr hab. Barbara Bojko, prof. UMK, Department of Pharmacodynamics and Molecular Pharmacology, Faculty of Pharmacy
- 8. Selected drugs action in the nervous system – molecular modeling study**
SUPERVISOR: Dr hab. Alicja Nowaczyk, prof. UMK, Department of Organic Chemistry, Faculty of Pharmacy
- 9. Analysis of ciprofloxacin influence on bladder cancer cells, in vitro study**
SUPERVISOR: Dr hab. Marta Pokrywczyńska, prof. UMK, Department of Regenerative Medicine, Cell and Tissue Bank, Chair of Urology, Faculty of Medicine
- 10. Thromboelastometry in full-term infants: establishing reference ranges in cord blood and an association with routine screening coagulation tests**
SUPERVISOR: Dr hab. Artur Słomka, prof. UMK, Department of Pathophysiology, Faculty of Pharmacy
- 11. Synthesis and spectroscopy characteristic of the new ruthenium complexes with potential anticancer properties**
SUPERVISOR: Dr Monika Richert, Department of Inorganic and Analytical Chemistry, Faculty of Pharmacy
- 12. Sampling devices for the determination of pharmacologically active compounds from oral fluid**
SUPERVISOR: Dr Krzysztof Goryński, Bioanalysis Scientific Group, Faculty of Pharmacy
- 13. New technologies in management of perioperative anxiety in cardiac surgery patients**
SUPERVISOR: Dr hab. Wojciech Pawliszak, prof. UMK, Department of Cardiac Surgery, Faculty of Medicine

14. The combined effect of norfloxacin and povidone-iodine on mixed-species biofilm formed by *Proteus mirabilis* and *Escherichia coli*

SUPERVISOR: Dr Joanna Kwiecińska-Piróg, Department of Microbiology, Faculty of Pharmacy

15. Biodegradable capsules for delivery of anticancer agents

SUPERVISOR: Dr hab. Anna Bajek, prof. UMK, Department of Tissue Engineering, Chair of Urology, Faculty of Medicine

16. Chitosan for future cancer cell encapsulation in tumor microenvironment (TME)

SUPERVISOR: Dr hab. Anna Bajek, prof. UMK, Department of Tissue Engineering, Chair of Urology, Faculty of Medicine