University of Pécs
Faculty of Pharmacy

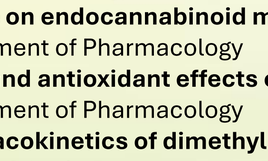
Sustainability
Working Group

United Nations sustainable development goals

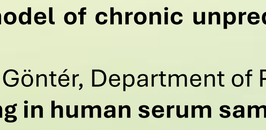
Sustainable development includes **eradicating poverty**, **reducing inequalities**, and **promoting the sustainable management of natural resources and ecosystems**, as well as **sustainable, inclusive and equitable economic growth**. The 17 Sustainable Development Goals call on all countries – poor, rich and middle-income – to take action to promote prosperity and protect the planet.

Sustainable future with YOUR research! - TDK topics along the UN Sustainable Development Goals

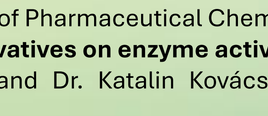
- **Investigation of molecular mechanisms involved in endometriosis, identification of potential therapeutic targets in cell lines**
  - Supervisor: Dr. Krisztina Pohóczky, Department of Pharmacology
- **Examination of the expression of Transient Receptor Potential ion channels in ovarian carcinoma**
  - Supervisor: Dr. Krisztina Pohóczky, Department of Pharmacology
- **Molecular investigation of inflammatory mechanisms involved in the development and progression of endometriosis**
  - Supervisor: Dr. Krisztina Pohóczky, Department of Pharmacology
- **Testing the content of natural dietary supplements**
  - Supervisor: Dr. Eszter Fliszár-Nyúl Eszter, Department of Pharmacology
- **The effects of SGLT2 inhibitors on mood in diabetic patients**
  - Supervisor: Dr. Gábor Pozsgai and Dr. András Nagy, Department of Pharmacology
- **The effects of SGLT2 inhibitors on mood in an animal model of depression**
  - Supervisor: Dr. Gábor Pozsgai and Dr. András Nagy, Department of Pharmacology
- **Study of the effect of dimethyl trisulfide on endocannabinoid metabolizing enzymes**
  - Supervisor: Dr. Gábor Pozsgai, Department of Pharmacology
- **Investigation of the radical scavenging and antioxidant effects of dimethyl trisulfide**
  - Supervisor: Dr. Gábor Pozsgai, Department of Pharmacology
- **Investigation of the transdermal pharmacokinetics of dimethyl trisulfide in mice**
  - Supervisor: Dr. Gábor Pozsgai and Kitti Göntér, Department of Pharmacology
- **Investigation of the potential anxiolytic and antidepressant effects of dimethyltrisulfide via the endocannabinoid system in a mouse model of chronic unpredictable mild stress-induced anxiety and depression**
  - Supervisor: Dr. Gábor Pozsgai and Kitti Göntér, Department of Pharmacology
- **Isoflurane-induced hepatotoxicity testing in human serum samples**
  - Supervisor: Dr. Gábor Kriszta, Department of Pharmacology
- **Transportmechanisms and metabolism of drug molecules in the small intestine. Structure-activity relationships.**
  - Supervisor: Dr. Attila Almási, Institute of Pharmaceutical Chemistry
- **Study on the effect of curcuminoid derivatives on enzyme activity**
  - Supervisor: Dr. Zsuzsanna Rozmer and Dr. Katalin Kovács-Rozmer, Institute of Pharmaceutical Chemistry
- **Study on the effect of curcuminoid derivatives on the cell cycle**
  - Supervisor Dr. Zsuzsanna Rozmer and Dr. Edit Fülöpné Kiss Edit, Institute of Pharmaceutical Chemistry
- **ll-cycleInteraction of curcuminoids and chalcone analogues with cellular macromolecules.**
  - Supervisor: Dr. Zsuzsanna Rozmer and Dr. Levente Tyukodi, Institute of Pharmaceutical Chemistry
- **Investigation of the expression and role of TRP receptors in postnatal and adult brain stem cells**
  - Supervisor: Dr. Katalin Kovács-Rozmer, Institute of Pharmaceutical Chemistry
- **The role of Hemokinin-1 in the regulation of reproductive processes**
  - Supervisor: Dr. Katalin Kovács-Rozmer and Dr. Éva Borbély , Institute of Pharmaceutical Chemistry



- **Testing of cyclodextrin bead polymer for gastrointestinal decontamination in an in vitro model**
  - Supervisor: Dr. Eszter Fliszár-Nyúl Eszter, Department of Pharmacology



- **Testing the quality of individual magistral preparations**
  - Supervisor: Dr. Gábor Kriszta, Department of Pharmacology



- **Utilization of waste heat using thermoelectrochemical cells**

- **Electrosynthesis of bactericidal polymers**
  - Supervisor Dr. László Kiss , Department of Organic and Pharmacological Chemistry
- **Adsorption of organic pollutants on iron-naphthol particles**
  - Supervisor Dr. László Kiss , Department of Organic and Pharmacological Chemistry
- **Binding of microplastic particles on electrosynthesized polymers**
  - Supervisor Dr. László Kiss , Department of Organic and Pharmacological Chemistry

- **Rational cocrystal design using virtual screening and experimental validation**
  - Supervisor: Dr. Beáta Lemli, Institute of Pharmaceutical Technology and Biopharmacy

- **In vitro study of the removal of pharmaceutical residues in wastewater**
  - Supervisor: Dr. Eszter Fliszár-Nyúl Eszter, Department of Pharmacology

- **Ethnopharmacobotany: traditional use of medicinal plants**
  - Supervisor Dr. Nóra Papp, Department of Pharmacognosy

- **Biological activity of honeys of medicinal plant origin**
  - Supervisor: Dr. Ágnes Farkas and Viktória Biró, Department of Pharmacognosy

- **Inhibitory effect of essential oils and their components on biofilm formation**
  - Supervisor: Dr. Viktória Lilla Balázs and Dr. Edit Ormai, Department of Pharmacognosy

- **The binding of bioactive compounds extracted from herbs and spices to plasma proteins**
  - Supervisor: Dr. Beáta Lemli, Institute of Pharmaceutical Technology and Biopharmacy

- **Sustainable water purification: Carbon nanostructures for pharmaceutical residue removal**