

CURRICULUM VITAE
Peter Kubatka, Prof., RNDr., PhD

Research field	Experimental and translational breast cancer research, nutraceuticals/phytochemicals, mechanisms of carcinogenesis, chemoprevention, therapeutic resistance, and 3PM/PPPM-oriented oncology.
Academic metrics	230 WoS/Scopus-indexed articles, 60 as first author; H-index 52 (WoS); more than 9.000 Scopus citations without self-citations (March, 2026).
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RESEARCH LEADERSHIP, TEACHING, AND SUPERVISION

- Principal investigator/project leader of 7 Slovak national VEGA research projects (2002-2025).
- Long-term university teaching in medical biology, clinical oncology, and related biomedical disciplines.
- Supervision completed: 22 bachelor's theses, 50 master's theses, and 7 PhD theses.
- International scientific collaboration with the University of Bonn, Weill Cornell Medicine-Qatar, and Ludwig Maximilian University of Munich.

ACTIVITIES IN THE PROJECT FIELD DURING THE LAST 5 YEARS

- Advanced the concept of phytochemical- and flavonoid-based mitigation of breast cancer plasticity, resistance, and progression, with emphasis on NF-kappaB, PI3K/HIF-1, MAPK, JAK-STAT, cancer stemness, and 3PM/PPPM-oriented interpretation.
- Author of PubMed-indexed reviews and conceptual papers on anti-breast cancer effects of phytochemicals, therapy-resistant breast cancer, triple-negative breast cancer heterogeneity, tamoxifen-related mechanisms, and epigenetic/translational perspectives.
- Published original preclinical studies on plant-derived preparations in rodent and in vitro breast carcinoma models, including *Salvia officinalis*, *Aronia melanocarpa* fruit peels, bilberry peel-enriched pomace, seaberry fruit peels, and many others.
- Integrated mechanistic, histopathological, and translational endpoints in experimental breast cancer research, including apoptosis/proliferation-related assessment, tumor microenvironment interpretation, and clinically relevant biomarker-guided framing.
- Strengthened international and interdisciplinary collaboration connecting pharmacognosy, pathology, oncology, physiology, and predictive, preventive, and personalised medicine.

SELECTED RECENT WOS-INDEXED OUTPUTS DOCUMENTING THE ABOVE ACTIVITIES

- Dvorska et al. Bilberry (*Vaccinium myrtillus* L.) peel-enriched pomace as natural anticancer agents: preclinical evidence from breast carcinoma models supporting preventive and personalized treatment strategies. *J Nutr.* 2026.
- Kubatka et al. Targeting the MAPK signaling pathway: flavonoids in 3P medicine as modulators of resistance in breast cancer patients. *EPMA J.* 2025.
- Kubatka et al. Flavonoid-modulated JAK-STAT signaling mitigates malignant transformation and drug resistance in breast tumors: A clinically relevant 3PM-guided innovation. *J Adv Res.* 2025.
- Kubatka et al. Cell plasticity modulation by flavonoids in resistant breast carcinoma targeting NF-kappaB signaling. *Cancer Metastasis Rev.* 2024.
- Kubatka et al. *Salvia officinalis* L. exerts oncostatic effects in rodent and in vitro models of breast carcinoma. *Front Pharmacol.* 2024.
- Dvorska et al. *Aronia melanocarpa* L. fruit peels show anti-cancer effects in breast carcinoma models. *Food Chem Toxicol.* 2024.

- Mazurakova et al. Significance of flavonoids targeting PI3K/Akt/HIF-1 α signaling pathway in therapy-resistant cancer cells - A potential contribution to the predictive, preventive, and personalized medicine. *J Adv Res.* 2024.
- Kubatka et al. Flavonoids against non-physiologic inflammation attributed to cancer initiation, development, and progression-3PM pathways. *EPMA J.* 2021.