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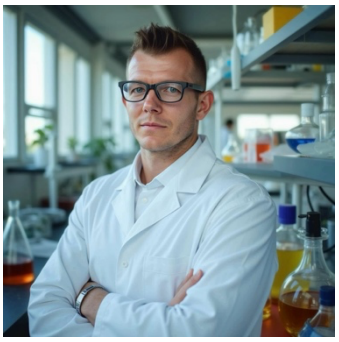
H-index – 16
Impact Factor: 157,376
Number of citations in Web of Science: 868

**Educational Background**

**2023** — Habilitation (DSc), Medical University of Warsaw, Poland, Discipline: Medical Sciences
**2017** — PhD in Medical Biology, Mossakowski Medical Research Institute, Polish Academy of Sciences, Warsaw, Poland
**2011** — MSc in Environmental Chemistry, Nicolaus Copernicus University, Toruń, Poland
**2011** — University of Warsaw – Centre for Forensic Sciences; Postgraduate studies in evidence law, criminalistics, and related sciences;

**Selected Research Projects & Grants**

- ⇒ *Principal Investigator*, "The effect of keratin preparations on skin wound healing in animal models of diabetes," (EU Operational Program, 2022–2023).
- ⇒ *Investigator*, NCN Grant: "Role of piezolites and osmolytes in cardiovascular system," 2020–2022.
- ⇒ *Investigator*, API synthesis, formulation and in vivo testing of topical postbiotic-based cream for atopic dermatitis, 2022–present.

**Teaching & Supervision**

- ⇒ Lecturer in physiology, pathophysiology, biology, and biophysics for medical and dental students (Polish & English Division).
- ⇒ Supervisor for Young Investigator Grants and student mini-grants.

**Editorial and Reviewer Roles**

- ⇒ *Guest Editor*, Pharmaceutics (Special Issue: Biomaterials in Skin Wound Healing, Vol. I & II).
- ⇒ *Reviewer* for: J Eur Acad Dermatol Venereol, J Tissue Eng Regen Med, Int J Dermatol, ACS Biomaterials Sci Eng, Pharmaceutics, ACS Nano and others.

**Selected Awards & Honors**

⇒ Rector's Team Award, Medical University of Warsaw, 2024
⇒ Individual Scientific Award, Medical University of Warsaw, 2024
⇒ "Paul Dudley White International Scholar Award," American Heart Association, 2019 & 2022
⇒ "Article Impact Award 2018," American Journal of Physiology
⇒ Ministry of Health Award for scientific achievements, 2020

**Skills**

⇒ **Experimental:** In vivo models (rodents), surgical techniques, wound healing assessment, tissue processing, histology, immunohistochemistry, cell culture

**Publications on Wound Healing & Regenerative Medicine**

1. Stradczuk-Mazurek M, Mazurek Ł, Konop M. Silk Sericin in Dermatological Diseases: from Preclinical Studies to Future Clinical Applications. Macromolecular Bioscience. 2025:1-11 doi:10.1002/mabi.202500058
2. Konop M. Keratin Biomaterials for Wound Healing and Tissue Regeneration: A Promising Approach in Biomedical Applications. Advances in Clinical and Experimental Medicine. 2025 7(34):1-20
3. Mazurek Ł, Kuś M, Jurak J, Rybka M, Kuczeriszka M, Stradczuk-Mazurek M, Konop M, Kuś M. Biomedical potential of alginate wound dressings – From preclinical studies to clinical applications: A review. International Journal of Biological Macromolecules. 2025 309(Pt 2):1-14 doi:10.1016/j.ijbiomac.2025.142908
4. Rybka M, Mazurek Ł, Jurak J, Laskowska A, Zajdel M, Czuwara J, Sulejczak D, Szudzik M, Samborowska E, Schwartz R, Dziadek M, Salagierski S, Drapała A, Ufnal M, Konop M. Keratin-TMAO dressing accelerates full-thickness skin wound healing in diabetic rats via M2-macrophage polarization and the activation of PI3K/AKT/mTOR signaling pathway. International Journal of Biological Macromolecules. 2025 310(Part 3):1-13 doi:10.1016/j.ijbiomac.2025.143313
5. Rybka M, Mazurek Ł, Czuwara J, Laskowska A, Szudzik M, Ruszczak Z, Sulejczak D, Schwartz R, Kłodzińska E, Drapała A, Konop M. Biomedical Potential of Keratin-Biphalin Wound Dressing in Diabetic Mice: In Vitro and In Vivo Studies. Journal of Natural Fibers. 2024 21(1):1-16 doi:10.1080/15440478.2023.2287647
6. Mazurek Ł, Rybka M, Jurak J, Frankowski J, Konop M. Silk Sericin and Its Effect on Skin Wound Healing: A State of the Art. Macromolecular Bioscience. 2024 24(10):1-10 doi:10.1002/mabi.202400145
7. Rybka M, Mazurek Ł, Konop M. Beneficial Effect of Wound Dressings Containing Silver and Silver Nanoparticles in Wound Healing—From Experimental Studies to Clinical Practice. Life. 2023 13(1):1-20 doi:10.3390/life13010069
8. Konop M, Rybka M, Szudzik M, Mazurek Ł, Laskowska A, Sulejczak D, Ruszczak Z, Mazgaj R, Cieślik B, Schwartz R, Samborowska E, Frankowski J, Waszkowski A, Konopelski P, Czuwara J. Keratin-Butyrate Scaffolds Promote Skin Wound Healing in Diabetic Rats Through Down-Regulation of IL-1β and Up-Regulation of Keratins 16 and 17. Journal of Natural Fibers. 2023 20(1):1-16 doi:10.1080/15440478.2022.2136325

9. Konop M. Biomaterials in Skin Wound Healing and Tissue Regenerations—An Overview. Pharmaceutics. 2022 14(6):1-4 doi:10.3390/pharmaceutics14061291
10. Mazurek Ł, Szudzik M, Rybka M, Konop M. Silk Fibroin Biomaterials and Their Beneficial Role in Skin Wound Healing. Biomolecules. 2022 12(12):1-17 doi:10.3390/biom12121852
11. Konop M, Laskowska A, Rybka M, Kłodzińska E, Sulejczak D, Schwartz R, Czuwara J. Keratin Scaffolds Containing Casomorphin Stimulate Macrophage Infiltration and Accelerate Full-Thickness Cutaneous Wound Healing in Diabetic Mice. Molecules. 2021 26(9):1-19 doi:10.3390/molecules26092554
12. Konop M, Rybka M, Drapała A. Keratin Biomaterials in Skin Wound Healing, an Old Player in Modern Medicine: A Mini Review. Pharmaceutics. 2021 13(12):1-20 doi:10.3390/pharmaceutics13122029
13. Konop M, Czuwara J, Kłodzińska E, Laskowska A, Sulejczak D, Damps T, Zielenkiewicz U, Brzozowska I, Sureda A, Kowalkowski T, Schwartz R, Rudnicka L. Evaluation of keratin biomaterial containing silver nanoparticles as a potential wound dressing in full-thickness skin wound model in diabetic mice. Journal of Tissue Engineering and Regenerative Medicine. 2020 14(2):334-346 doi:10.1002/term.2998
14. Bochynska-Czyz M, Redkiewicz P, Kozlowska H, Matalinska J, Konop M, Kosson P. Can Keratin Scaffolds be used for Creating Three-dimensional Cell Cultures?. Open Medicine (Warsaw, Poland). 2020 15:249-253 doi:10.1515/med-2020-0031
15. Liu M, Borowiec J, Sun L, Konop M, Rahman M, Taallah A, Boi F, Gillin W. Experimental studies on the conduction mechanism and electrical properties of the inverted Ba doped ZnO nanoparticles based memristor. Applied Physics Letters. 2019 115(7):1-6 doi:10.1063/1.5110888
16. Konop M, Kłodzińska E, Borowiec J, Laskowska A, Czuwara J, Konieczka P, Cieślik B, Waraksa E, Rudnicka L. Application of micellar electrokinetic chromatography for detection of silver nanoparticles released from wound dressing. Electrophoresis. 2019 40(11):1565-1572 doi:10.1002/elps.201900020
17. Konop M, Czuwara J, Kłodzińska E, Laskowska A, Zielenkiewicz U, Brzozowska I, Nabavi S, Rudnicka L. Development of a novel keratin dressing which accelerates full-thickness skin wound healing in diabetic mice: In vitro and in vivo studies. Journal of Biomaterials Applications. 2018 33(4):527-540 doi:10.1177/0885328218801114
18. Konop M, Sulejczak D, Czuwara J, Kosson P, Misicka A, Lipkowski A, Rudnicka L. The role of allogenic keratin-derived dressing in wound healing in a mouse model. Wound Repair and Regeneration. 2017 25(1):62-74 doi:10.1111/wrr.12500
19. Konop M, Damps T, Misicka A, Rudnicka L. Certain Aspects of Silver and Silver Nanoparticles in Wound Care: A Minireview. Journal of Nanomaterials. 2016 2016:1-10 doi:10.1155/2016/7614753

**Other Publications**

20. Wojciechowki J, Czapla M, Konop M, Juárez-Vela R, Rosińczuk J. Evaluation of Accidental and Intentional Pediatric Poisonings: Retrospective Analysis of Emergency Medical Service Interventions in Wroclaw, Poland. Nursing Reports. 2024 14(3):2523-2534 doi:10.3390/nursrep14030186
21. Maksymiuk K, Szudzik M, Samborowska E, Chabowski D, Konop M, Ufnal M. Mice, rats, and guinea pigs differ in FMOs expression and tissue concentration of TMAO, a gut bacteria-derived biomarker of cardiovascular and metabolic diseases. PLoS One. 2024 19(1):1-21 doi:10.1371/journal.pone.0297474
22. Gawryś-Kopczyńska M, Szudzik M, Samborowska E, Konop M, Chabowski D, Onyszkiewicz M, Ufnal M. Spontaneously hypertensive rats exhibit increased liver flavin monooxygenase expression and elevated plasma TMAO levels compared to normotensive and Ang II-dependent hypertensive rats. Frontiers in Physiology. 2024 15:1-9 doi:10.3389/fphys.2024.1340166
23. Buszewski B, Błońska D, Kłodzińska E, Konop M, Kubesová A, Šalplachta J. Determination of Pathogens by Electrophoretic and Spectrometric Techniques. Critical Reviews in Analytical Chemistry. 2024 54(8):2960-2983 doi:10.1080/10408347.2023.2219748
24. Jaworska K, Kopacz W, Koper M, Szudzik M, Gawryś-Kopczyńska M, Konop M, Hutsch T, Chabowski D, Ufnal M. Enalapril Diminishes the Diabetes-Induced Changes in Intestinal Morphology, Intestinal RAS and Blood SCFA Concentration in Rats. International Journal of Molecular Sciences. 2022 23(11):1-12 doi:10.3390/ijms23116060
25. Gąsecka A, Rzepa Ł, Konwerski M, Zawadzka M, Wysocki K, Budnik M, Czub P, Wilimski R, Wondołkowski M, Wilczyńska-Burlikowska J, Scisło P, Konop M, Huczek Z, Kochman J, Kochanowski J, Opolski G, Filipiak K, Ufnal M, Kapłon-Cieślicka A. Trimethylamine-N-oxide versus echocardiographic, biochemical and histopathological indices of heart failure in patients with severe aortic stenosis: Rationale and design of the prospective, observational TASTE study. Cardiology Journal (d. Folia Cardiologica). 2022 29(4):691-697 doi:10.5603/CJ.a2022.0023
26. Konopelski P, Konop M, Perlejewski K, Bukowska-Ośko I, Radkowski M, Onyszkiewicz M, Jaworska K, Mogilnicka I, Samborowska E, Ufnal M. Genetically determined hypertensive phenotype affects gut microbiota composition, but not vice versa. Journal of Hypertension. 2021 39(9):1790-1799 doi:10.1097/HJH.0000000000002864
27. Konop M, Rybka M, Waraksa E, Laskowska A, Nowiński A, Grzywacz T, Drapała A, Karwowski W, Kłodzińska E. Electrophoretic Determination of Trimethylamine (TMA) in Biological Samples as a Novel Potential Biomarker of Cardiovascular Diseases Methodological Approach. International Journal of Environmental Research and Public Health. 2021 18(23):1-11 doi:10.3390/ijerph182312318
28. Frączek K, Kowalczyk A, Pękala M, Kasarełło K, Sygitowicz G, Sulejczak D, Zaremba M, Konop M, Frankowska M, Filip M, Bujalska-Zadrożny M, Kleczkowska P. The Positive and Negative Outcome of Morphine and Disulfiram Subacute Co-Administration in Rats in the Absence of Ethanol Challenge. Pharmaceutics. 2021 13(1):1-17 doi:10.3390/pharmaceutics13010029

29. Jaworska K, Konop M, Hutsch T, Perlejewski K, Radkowski M, Grochowska M, Bielak-Zmijewska A, Mosieniak G, Sikora E, Ufnal M. Trimethylamine But Not Trimethylamine Oxide Increases With Age in Rat Plasma and Affects Smooth Muscle Cells Viability. Journals of Gerontology Series A - Biological Sciences and Medical Sciences. 2020 75(7):1276-1283 doi:10.1093/gerona/glz181
30. Gawrys-Kopczynska M, Konop M, Maksymiuk K, Kraszewska K, Derzsi L, Sozanski K, Holyst R, Pilz M, Samborowska E, Dobrowolski L, Jaworska K, Mogilnicka I, Ufnal M. TMAO, a seafood-derived molecule, produces diuresis and reduces mortality in heart failure rats. eLife. 2020 9:1-31 doi:10.7554/eLife.57028
31. Waraksa E, Pokrywka A, Konop M, Namieśnik J, Kłodzińska E. Comparison of GC-MS and MEKC methods for caffeine determination in preworkout supplements. Electrophoresis. 2019 40(11):1540-1549 doi:10.1002/elps.201800512
32. Jaworska K, Konop M, Bielińska K, Hutsch T, Dziekiewicz M, Banaszkiewicz A, Ufnal M. Inflammatory bowel disease is associated with increased gut-to-blood penetration of short-chain fatty acids: A new, non-invasive marker of a functional intestinal lesion. Experimental Physiology. 2019 104(8):1226-1236 doi:10.1113/EP087773
33. Konopelski P, Konop M, Gawryś-Kopczyńska M, Podsadni P, Szczepańska A, Ufnal M. Indole-3-Propionic Acid, a Tryptophan-Derived Bacterial Metabolite, Reduces Weight Gain in Rats. Nutrients. 2019 11(3):1-13 doi:10.3390/nu11030591
34. Waraksa E, Filipiak W, Kłodzińska E, Ozimek M, Konop M, Namieśnik J. Nonsteroidal anti-inflammatory drug metabolism studies in horses in view of doping control: analytical strategies and challenges. Analytical Methods. 2019 11(30):3767-3792 doi:10.1039/C9AY00692C
35. Kowalczyk A, Kleczkowska P, Konop M, Kasarełło K, Czuwara J, Pękala M, Sosnowski P, Sacharczuk M, Cudnoch-Jędrzejewska A, Rudnicka L, Bujalska-Zadrożny M. Determination of the anti-inflammatory properties and analgesic activity of the AA3052 chimeric peptide against CFA-induced inflammatory pain. Animal Science Papers and Reports. 2018 36(2):219-240
36. Konop M, Radkowski M, Grochowska M, Perlejewski K, Samborowska E, Ufnal M. Enalapril decreases rat plasma concentration of TMAO, a gut bacteria-derived cardiovascular marker. Biomarkers. 2018 23(4):380-385 doi:10.1080/1354750X.2018.1432689
37. Hutsch T, Konop M, Onyszkiewicz M, Podsadni P, Szczepańska A, Turło J, Ufnal M. Colonic indole, gut bacteria metabolite of tryptophan, increases portal blood pressure in rats. American Journal of Physiology-Regulatory Integrative and Comparative Physiology. 2018 315(4):646-655 doi:10.1152/ajpregu.00111.2018
38. Huc T, Drapała A, Gawryś M, Konop M, Bielińska K, Zaorska E, Samborowska E, Wyczałkowska-Tomasik A, Pączek L, Dadlez M, Ufnal M. Chronic, low-dose TMAO treatment reduces diastolic dysfunction and heart fibrosis in hypertensive rats. American Journal of Physiology-Heart and Circulatory Physiology. 2018 315(6):1805-1820 doi:10.1152/ajpheart.00536.2018
39. Sar-Pomian M, Konop M, Gala K, Rudnicka L, Olszewska M. Scalp involvement in pemphigus: a prognostic marker. Postępy Dermatologii i Alergologii. 2018 XXXV(3):293-298 doi:10.5114/pdia.2017.71267

40. Zaorska E, Konop M, Ostaszewski R, Koszelewski D, Ufnal M. Salivary Hydrogen Sulfide Measured with a New Highly Sensitive Self-Immolative Coumarin-Based Fluorescent Probe. Molecules. 2018 23(9):1-16 doi:10.3390/molecules23092241
41. Damps T, Laskowska A, Kowalkowski T, Prokopowicz M, Puszko A, Sosnowski P, Czuwara J, Konop M, Różyczki K, Borkowska J, Misicka A, Rudnicka L. The effect of wool hydrolysates on squamous cell carcinoma cells in vitro. Possible implications for cancer treatment. PLoS One. 2017 12(8):1-18 doi:10.1371/journal.pone.0184034
42. Kurzepa K, Różycki K, Bochyńska M, Konop M, Urbańczyk-Lipkowska Z, Lipkowski A. Molecular scaffolds for three-dimensional cell and tissue cultures. Polimery. 2013(9):663-669 doi:10.14314/polimery.2013.663