

Curriculum Vitae

Univ.-Prof. Dipl.-Ing. Dr. **Benedikt Warth**

Faculty of Chemistry
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ORCID: 0000-0002-6104-0706

Researcher ID: O-1372-2017

Date of birth: July 1984

Citizenship: Germany

Research achievements in numbers (since 2010)

- ✓ **120 papers** in peer-reviewed journals (>6500 citations, **H-index 46** (Google Scholar) including 21 as (co-) first, 33 as corresponding, and 26 as senior author and nine invited review/perspective articles.
- ✓ >40 invited talks at national and international conferences or institutions
- ✓ 11 research grants as PI or Co-I (funding ~10 M€)
- ✓ 15 academic awards, prices & scholarships
- ✓ Published in leading multidisciplinary and discipline-specific journals incl. *Nature Biotechnol*, *Nature Meth*, *Nature Comm*, *Cell Chem Biol*, *Annual Reviews*, *Trends in Biotechnol/Pharmacol/Microbiol*, *Cancer & Metabolism*, *Analytical Chemistry*

Main areas of research

Current research interests focus on the development and optimization of novel analytical methods based on mass spectrometry and cross-omics approaches guided by global and stable isotope metabolomics. A key aspect is the advanced exposure assessment of toxic chemicals via human biomonitoring, the impact of multi-class environmental exposures (i.e. the exposome) in health and disease, and the investigation of drug-exposome interactions. Moreover, the detailed evaluation of metabolism and mixture effects of xenobiotics (food bio-actives and contaminants) are a major focus.

Academic milestones and positions held to date

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| 2022 – | Full Professor , Faculty of Chemistry, Department of Food Science and Toxicology, University of Vienna (UNIVIE), Austria |
| 2022 – | ERC Consolidator Grant , ‘Deciphering the exposome by metabolomics technology in breast cancer (EXPOMET)’; 2.9 M€ funding approved |
| 2020 – | Deputy-Head , Department of Food Chemistry and Toxicology, University of Vienna |
| 2020 – | Coordinator, Exposome Austria (Large-scale Research Infrastructure for Exposome Research); Executive Board Member of the pan-European EIRENE-ESFRI preparatory phase project (Roadmap 2021) |
| 2020 – | Member of the US EPA initiative BP4NTA (Benchmarking for Non-Targeted Analysis) |
| 2020 – | Delegate , Green Chemistry Platform of the Federal Ministry of Environment and Climate Action (BMK) |
| 2020 – | Panel Member , Vienna Doctoral School in Chemistry (DoSChem), Focus area B (bio/environmental analytics and food chemistry/physiology) |
| 2019 – | Delegate , <i>Food Chemistry</i> Working Group of the GOECH (Austrian Chemical Society) |
| 2019 – | Presider , ‘Exposome Interest Group’ of the American Society for Mass Spectrometry |
| 2018 – | Consortium Member , Environmental Sciences Research Network, UNIVIE |
| 2018 – | Consortium Member , Research Network Chemistry meets Microbiology, UNIVIE |
| 2018 – | Delegate , Austrian Platform for Human Biomonitoring (reports to the parliament) |
| 2018 – | Steering Committee Member , Vienna Metabolomics Center; UNIVIE |

2018 – 2022 **Associate Professor**, Faculty of Chemistry, Department of Food Science and Toxicology, UNIVIE, Austria [tenured, on unpaid leave during §99/1 appointment]

2017 – 2018 **Assistant Professor**, tenure-track; University of Vienna, Austria

2017 – Group leader Global Exposomics and Biomonitoring Laboratory, UNIVIE

2016 – 2017 **Senior Research Associate** (Erwin-Schrödinger fellow); Center for Metabolomics, The Scripps Research Institute, CA, USA

2015 – 2016 **Senior Scientist**; Faculty of Chemistry, UNIVIE, Austria

2013 – 2015 **Research Associate**; Schuhmacher lab, BOKU University, Vienna, Austria

2012 **Paternity leave** (six month)

2009 – 2012 **Research Assistant**; Krska lab, Department IFA-Tulln, BOKU University, Austria

2009 – 2012 **Graduate school program Applied Bioscience Technologies (AB-Tec)** of the Vienna University of Technology (TU Wien)

2008 **Undergraduate research assistant**; Mandenius lab, **Linköping University, Sweden**

2007 – 2009 **M.Sc.** in Biotechnology, BOKU University, Vienna, Austria; Master thesis at Department of Biotechnology, Linköping University, Sweden

2003 – 2007 **B.Sc.** in Biotechnology and Food Science, BOKU University, Vienna, Austria

Degrees

2012 **PhD (highest honors), Analytical Chemistry**
Center for Analytical Chemistry, Department IFA-Tulln, University of Natural Resources and Life Sciences, Vienna (BOKU), Austria; PhD supervisor: Prof. Rudolf Krska

2009 **Master (highest honors), Biotechnology**
University of Natural Resources and Life Sciences, Vienna (BOKU), Austria;
Master thesis at Linköping University, Sweden; Supervisor: Prof. Carl-Fredrik Mandenius

2007 **Bachelor, Biotechnology and Food Science**
University of Natural Resources and Life Sciences, Vienna (BOKU), Austria

PUBLICATIONS IN HIGH IF JOURNALS

M-index (H-index/active years): 3.7

IF > 25: 3 publications (*Nature Biotechnology, Nature Methods, Cell Host Microbe*)

IF > 10: 10+ publications (*Nature Communications, Nature Protocols, Trends in Biotechnology, Trends in Pharmacological Sciences, Trends in Microbiology, Annual Reviews, ACS Nano*)

IF > 5: 30+ publications (*Anal Chem, Anal Chim Acta, Environ Health Perspect, Cell Chem Biol etc.*)

Selected memberships in academic societies

American Society for Mass Spectrometry (ASMS)

Federation of European Toxicologists (EUROTOX)

Austrian Chemical Society (GOECH)

Austrian Society for Analytical Chemistry (ASAC)

Austrian Society of Toxicology (ASTOX)

Society for Mycotoxin Research

International Society for Mycotoxicology

Metabolomics Society

Prices, awards & scholarships

2021	Förderungspreis der Stadt Wien in the fields of mathematics, informatics, technology
2021	Brigitte-Gedek Science Award of the Mycotoxin Society for outstanding research on the placental transfer of a xenoestrogen (highest award in natural toxin research globally)
2020	Fritz Feigl-Prize of the Austrian Society of Analytical Chemistry (ASAC) for outstanding contributions in the development and application of exposomic technology
2017	Anton-Paar Science Award of the Austrian Chemical Society (GOECH) for excellent public activity
2015	Erwin-Schrödinger-Fellowship (FWF); Project “ <i>Metabolomics to investigate combined cancer therapy</i> ” at the Scripps Research Institute, La Jolla, CA, USA
2015	Analytical and Bioanalytical Chemistry, Best Paper Award: Warth et al. paper voted as top candidate
2013	Best Paper Award from the University of Natural Resources and Life Sciences, Vienna (BOKU) for an excellent publication of a young researcher
2012	Science & Innovation Award sponsored by Raiffeisen: for excellent research contributions and an outstanding publication in the field of life sciences
2012	Young Investigators Award from the Austrian Society of Analytical Chemistry (ASAC): for successful method development and validation in the area of LC-MS/MS
2012	Publication Award from the Department IFA-Tulln for outstanding publication activity 2011/12
2012	Hygiene Prize from the Austrian Society for Hygiene, Microbiology and Preventive Medicine (ÖGHMP): for excellent research in the field of food safety
2011	Innovation Award from the Accent Founder’s Service (2 nd place): for innovative and economically promising biomarker research
2010	INITIS Award (general technologies category, 2 nd place): for bioprocess technology innovations in the area of software sensor engineering
2008	Preparatory Research Scholarship at Linköping University, Sweden (2 months)
2007	Erasmus Mobility Scholarship from the European Commission (12 months)

Leadership in the organization of conferences, symposia, workshops (selection)

- (Co-)Presider of the ASMS ‘Exposome Interest Group’ 2019 (Atlanta), 2022 (Minneapolis), and 2023 (Houston, *upcoming*)
- Organizer of the Exposome Austria Launch Event at the University of Vienna (May 2022) in cooperation with the ministries of science (BMBWF) and the environment (BMK)
- Delegate of the US EPA initiative ‘BP4NTA’ (two joint publications on harmonization and standardization in non-targeted analysis in preparation); resulted from an ENTACT workshop
- EuroTox 2021 Copenhagen: Organizer and chair of the ‘Drug Exposome Interactions’ session (together with Angela Mally, Würzburg)

Faculty positions offered

University of Massachusetts, Amherst, USA (2017) – *declined*

Michigan State University, Department of Food Science and Nutrition, USA (2017) – *declined*

University of Vienna, Austria (2017) – *accepted*

Service on editorial boards of international journals

- Associate Editor *Exposome* by *Oxford Publishing* (established in 2021; the first journal fully dedicated to interdisciplinary exposome research; invited by EIC Gary Miller, Columbia University)
- Associate Editor *Frontiers in Molecular Biosciences*, section *Metabolomics* (since 2019; IF 6.1)
- Guest-editor, 'Metabolomics and the exposome' for *Frontiers in Public Health* (2019-2020)
- Guest-editor, 'Exposomics and Next Generation Biomonitoring' for *Environment International* (2021; IF 13.4)

Invited seminars, plenary and keynote lectures at international conferences (*selection*)

2022 HEAP Symposium, Graz, Austria (Invited plenary talk)
2022 World Mycotoxin Forum, Parma, Italy (Invited plenary talk)
2022 Food Science Days Austria, Graz (Keynote)
2021 National Institute of Environmental Health (NIEHS) Exposome Webinar Series (Invited talk)
2021 Precision medicine workshop of the Metabolomics Society (Invited talk)
2021 Ghent University, NuGO exposomics webinar (Invited talk)
2021 University of British Columbia (UBC), Social Exposome Research Seminar Series (Invited talk)
2021 EuroTox 2021 Copenhagen (Invited talk)
2021 Masaryk University, Brno, RECETOX seminar series (Invited talk)
2020 ASMS Sanibel Conference 'Unraveling the Exposome', FL, USA (Invited talk)
2020 Munich Metabolomics Meeting (Invited talk)
2020 ASAC Symposium, Tulln, Austria (Award lecture)
2019 Gordon Research Seminar 'Disinfection Byproducts', Mt. Holyoke, MA, USA (Keynote)
2019 Yale School of Public Health, New Haven, CT, USA (Invited talk)
2019 WMFmeetsIUPAC, Belfast, Northern Ireland (Keynote)
2019 Sciex Berlin Meeting, Germany (Invited talk)
2019 EuroTox Conference, Helsinki, Finland (Invited talk)
2018 Analytica, Munich, Germany (Invited talk)
2018 Medical University of Vienna (Invited seminar)
2018 Austrian Proteomics and Metabolomics Symposium, Vienna, Austria (Keynote)
2017 American Chemical Society (ACS), National Meeting Washington DC, USA (Invited talk)
2017 Austrian Chemical Society, Annual Conference, Salzburg, Austria (Award lecture)
2017 Michigan State University, Department of Food Science and Nutrition, MI, USA
2017 University of Massachusetts, Amherst, Department of Food Science, MA, USA

→ 40+ invited talks (many at leading institutions (e.g. Yale) & conferences (e.g. GRC, ACS, IUPAC etc.).

→ 140+ abstracts as (co-)author at international scientific conferences

Special recognition of publications (only 1st and senior authorships)

Invited articles (selection)

Krausová M., Braun D., Buerki-Thurnherr T., Gundacker C., Schernhammer E., Wisgrill L., **Warth B.** (2023) *Annual Reviews in Pharmacology and Toxicology*. Invited expert review

Pristner M, **Warth B** (2020) *Trends in Pharmacological Sciences* 41, 12, 994-1005. Invited review article featured by two press releases

Oesterle I, Braun D, Berry D, Wisgrill L, Rompel A, **Warth B** (2021) *Annual Reviews in Food Science and Technology*. Invited expert review

Warth, B., Levin, N., Rinehart, D., Teijaro, J., Benton, H. P., and Siuzdak, G. (2017) *Trends in Biotechnology* 35, 481-483. Invited & featured article for special issue 'Computation & Modeling in Omics'

Warth, B., Braun, D., Ezekiel, C.N., Turner, P.C., Degen, G., Marko, D. (2016) *Chemical Research in Toxicology*, 29, 1087-1097. Invited and highly cited *Perspective* article on human biomonitoring

Warth, B., Sulyok, M., Krska, R. (2013) *Analytical and Bioanalytical Chemistry*, 405, 5687-5695. Invited and highly cited *Trend* article on new developments in MS-based exposure assessment

Service as ad hoc referee for national and international funding agencies

- **Ad hoc reviewer for 35+ journals** including *Analytical and Bioanalytical Chemistry*, *Analytical Chemistry*, *Analytica Chimica Acta*, *Archives of Toxicology*, *Bioanalysis*, *Chemosphere*, *Environmental Microbiology*, *Environmental Health Perspectives*, *Environment International*, *Food Chemistry*, *Journal of Agricultural and Food Chemistry*, *Journal of Chromatography A*, *Metabolomics*, *Mycotoxin Research*, *Nature Communications*, *Oncotarget*, *Rapid Communications in Mass Spectrometry*, *Scientific Reports*, *Talanta*, *Toxins*
- **Ad hoc grant application reviewer**
 - a. International Foundation for Science, Stockholm, Sweden (IFS)
 - b. South African Medical Research Council (SAMRC)
 - c. Austrian Student Exchange Service (OeAD)
 - d. Swiss Science Foundation (SFN)

LIST OF THIRD-PARTY FUNDS

Approved and currently on-going grants (only grants > 50 k€ are listed)

Project Title	Funding source	Amount	Period	Role
EXPOMET: Deciphering the exposome by metabolomics technology in breast cancer	European Research Council (ERC)	€ 2.93M	2023-2028	PI
Exposure and effect of toxin mixtures in infants	Austrian Science Fund (FWF)	€ 402,000	2019-2023	PI
Combating viral susceptibility in premature infants	Vienna Science & Technology Fund (WWTF)	€ 738,000 [€ 220,000]*	2021-2024	Co-PI
LC-HRMS metabolomics for chemical exposome analysis	Austrian Science Fund (FWF) Meitner Postdoc Fellowship	€ 178,000	2022-2024	Host
Ultra-sensitive, SIL-assisted quantification of the plasma exposome by SPE cleanup and HRMS	Chinese Scholarship Council (CSC) – PhD Fellowship	€ 58,000	2021-2025	Host
EIRENE PPP: Environmental Exposure Assessment Research Infrastructure Preparatory Phase	HORIZON-INFRA-2021-DEV-02	€ 249,375*	2022-2025	Partner
Exposome Austria- Research Infrastructure (RI) for Exposome Research; National Component of the RI for EnvIRonmental Exposure assessment in Europe – EIRENE RI; ESFRI Roadmap 2021	European Commission (ESFRI); funding approved nationally (BMK) and via hosting institutions	€ 5.5M (Austrian part until 2025)	2022-2025 (initial phase)	PI & national coordinator
PARC- European Partnership on the Assessment of Risks from Chemicals	European Commission	€ 1.2M (UNIVIE) [€ 0.6 M]*	2022-2028	Partner

*Budget allocated to the PI

Key cooperation partners

Caroline Johnson, Cancer metabolism and epidemiology, Yale School of Public Health, USA
Mingliang Fang, Metabolomics technology and database development, Nanyang U., Singapore
David Berry, Gut microbiome and microbial ecology, Univ. of Vienna, Austria
Lukas Wisgrill, Neonatology, infant health and metabolism, Medical Univ. Vienna, Austria
Gary Siuzdak, Metabolomics and bioinformatics, The Scripps Research Institute, CA, USA
Gunda Koellensperger, Stable isotope metabolomics, Univ. of Vienna, Austria
Chibundu N. Ezekiel, Exposure assessment in Sub-Saharan Africa, Babcock Univ., Nigeria
Christoph Bueschl, Bioinformatics, CeMM, Vienna, Austria
Sabina Sieri, Cancer epidemiology, statistics, National Cancer Institute, Milan, Italy
Eva Schernhammer, Epidemiology and early-life exposure, Medical Univ. Vienna & Harvard Publ. Health

TEN MOST IMPORTANT PUBLICATIONS

- (1) Jamnik T., Flasch M., Braun D., Fareed Y., Wasinger D., Seki D., Berry D., Berger A., Wisgrill L., **Warth B.*** (2022) Next-generation biomonitoring of the early-life chemical exposome in neonatal and infant development. *Nature Communications* 13, 2653.
<https://www.nature.com/articles/s41467-022-30204-y>
- (2) Flasch M., Fitz V., Rampler E., Ezekiel C.N., Koellensperger G., **Warth B.*** (2022) Integrated exposomics/metabolomics for rapid exposure and effect analyses. *Journal of the American Chemical Society (JACS) Au*, accepted manuscript (pre-print available)
<https://chemrxiv.org/engage/chemrxiv/article-details/6308a2070187d92d2da1eaa9>
- (3) Krausová M., Braun D., Buerki-Thurnherr T., Gundacker C., Schernhammer E., Wisgrill L., **Warth B.*** (2022) Understanding the Chemical Exposome During Fetal Development and Early Childhood: A Review. *Annual Reviews in Pharmacology and Toxicology*, 63.
<https://www.annualreviews.org/doi/10.1146/annurev-pharmtox-051922-113350>
- (4) Flasch M., Bueschl C., Del Favero G., Adam G., Schuhmacher R., Marko D., **Warth B.*** (2022) Elucidation of xenoestrogen metabolism by non-targeted, stable isotope-assisted mass spectrometry in breast cancer cells, *Environmental International* 158.
<https://www.sciencedirect.com/science/article/pii/S0160412021005651>
- (5) Pristner M and **Warth B.*** (2020) Drug-exposome interactions: The next frontier in precision medicine. *Trends in Pharmacological Sciences* 41, 12, 994-1005.
[https://www.cell.com/trends/pharmacological-sciences/fulltext/S0165-6147\(20\)30219-4](https://www.cell.com/trends/pharmacological-sciences/fulltext/S0165-6147(20)30219-4)
- (6) Xue J, Guijas C, Bento H, **Warth B**, Siuzdak G (2020) METLIN MS2 molecular standards database: a broad chemical and biological resource. *Nature Methods* 17, 953-954.
<https://www.nature.com/articles/s41592-020-0942-5>
- (7) **Warth B***, Raffener P, Granados A, Huan T, Fang M, Forsberg E, Benton P, Goetz L, Johnson C, Siuzdak G (2018) Metabolomics reveals that dietary xenoestrogens alter cellular metabolism induced by palbociclib/letrozole combination cancer therapy. *Cell Chemical Biology* 25, 291-300.
[https://www.cell.com/cell-chemical-biology/fulltext/S2451-9456\(17\)30459-2](https://www.cell.com/cell-chemical-biology/fulltext/S2451-9456(17)30459-2)
- (8) Preindl K, Braun D, Aichinger G, Sieri S, Fang M, Marko D, and **Warth B*** (2019) A generic liquid chromatography tandem mass spectrometry exposome method for the determination of xenoestrogens in biological matrices. *Analytical Chemistry* 91, 11334-11342.
<https://pubs.acs.org/doi/10.1021/acs.analchem.9b02446#>
- (9) Guijas C, Montenegro-Burke JR*, **Warth B****, Spilker M, Siuzdak G (2018) Metabolites that Modulate Phenotypes can be identified by Metabolomics Activity Screening. *Nature Biotechnology* 36, 316-320.
<https://www.nature.com/articles/nbt.4101>
- (10) Braun D, Ezekiel C, Abia W, Wisgrill L, Degen G, Turner P, Marko D, **Warth B*** (2018) Monitoring Early Life Mycotoxin Exposures via LC-MS/MS Breast Milk Analysis. *Analytical Chemistry* 90, 14569-14577.
<https://pubs.acs.org/doi/10.1021/acs.analchem.8b04576>

*Corresponding author; **Co-first author

Full publication list (only peer-reviewed)

1. Krausová M., Braun D., Buerki-Thurnherr T., Gundacker C., Schernhammer E., Wisgrill L., **Warth B.** (2023) Understanding the Chemical Exposome During Fetal Development and Early Childhood: A Review. *Annual Reviews in Pharmacology and Toxicology*, 63. doi.org/10.1146/annurev-pharmtox-051922-113350
2. Hartmann C., Jamnik T., Weiss S., Goess M., Fareed Y., Satrapa V., Braun D., Flasch M., **Warth B.**, Uhl M. (2023) Results of the Austrian Children's Biomonitoring Survey 2020 Part A: Per- and polyfluorinated alkylated substances, bisphenols, parabens and other xenobiotics. *International Journal of Hygiene and Environmental Health* 249, 114123
3. Flasch M., Fitz V., Rampler E., Ezekiel C.N., Koellensperger G., **Warth B.** (2022) Integrated exposomics/metabolomics for rapid exposure and effect analyses. *Journal of the American Chemical Society (JACS)* Au, 2, 2548-2560
4. Fareed Y., Braun D., Flasch M., Globisch D., **Warth B.** (2022) A broad, exposome-type evaluation of xenobiotic phase II biotransformation in human biofluids by LC-MS/MS. *Exposome*, Oxford Publishing, *accepted manuscript*, <https://doi.org/10.1093/exposome/osac008>
5. Jamnik T., Flasch M., Braun D., Fareed Y., Wasinger D., Seki D., Berry D., Berger A., Wisgrill L., **Warth B.** (2022) Next-generation biomonitoring of the early-life chemical exposome in neonatal and infant development. *Nature Communications*, 10.1038/s41467-022-30204-y
6. Ayeni K.I., Berry D., Wisgrill L., **Warth B.**, Ezekiel C.N. (2022) Early-life chemical exposome and gut microbiome development: African research perspectives within a global environmental health context. *Trends in Microbiology* 30, 1084, doi: 10.1016/j.tim.2022.05.008.
7. Oesterle I., Braun D., Rempel A., **Warth B.** (2022) Quantifying up to 90 polyphenols simultaneously in human bio-fluids by LC-MS/MS. *Analytica Chimica Acta*, 1216, 339977
8. Mildau K., Van der Hooft J., Flasch M., **Warth B.**, El Abiead Y., Koellensperger G., Zanghellini J., Bueschl C. (2022) Homologue series detection and management in LC-MS data with homologueDiscoverer. *Bioinformatics* 38, 5139-5140
9. Flasch M., Bueschl C., Del Favero G., Adam G., Schuhmacher R., Marko D., **Warth B.** (2022) Elucidation of xenoestrogen metabolism by non-targeted, stable isotope-assisted mass spectrometry in breast cancer cells, *Environmental International* 158. 10.1016/j.envint.2021.106940
10. Braun D., Abia W.A., Šarkanj B., Sulyok M., Waldhoer T., Erber A.C., Krska R., Turner P.C., Marko D., Ezekiel, C.N. **Warth B.** (2022) Mycotoxin-mixture assessment in mother-infant pairs in Nigeria: From mothers' meal to infants' urine. *Chemosphere*, 10.1016/j.chemosphere.2021.132226
11. Aichinger G., Pahlke G., Puntischer H., Groestlinger J., Grabher S., Braun B., Tillmann K., Plasenzotti R., Del Favero G., **Warth B.**, Höger H, Marko D. (2022) Markers for DNA damage are induced in the rat colon by the *Alternaria* toxin altertoxin-II, but not a complex extract of cultured *Alternaria alternata*. *Frontiers in Toxicology*, <https://doi.org/10.3389/ftox.2022.977147>
12. Ayeni K.I., Sulyok M., Krska R., **Warth B.**, Ezekiel C.N. (2022) Mycotoxins in complementary foods consumed by infants and young children within the first 18 months of life. *Food Control* 144, 109328.

13. Aichinger G., Grgic D., Beisl J., Crudo F., **Warth B.**, Varga E., Marko D. (2022) N-acetyl cysteine alters the genotoxic and estrogenic properties of Alternaria toxins in naturally occurring mixtures, *Emerging Contaminants*, Vol 8, Pages 30-38, DOI: 10.1016/j.emcon.2021.12.004
14. Bueschl C., Doppler M., Varga E., Seidl B., Flasch M., **Warth B.**, Zanghellini J. (2022) PeakBot: Machine learning based chromatographic peak picking, *Bioinformatics*, 22, DOI: 10.1093/bioinformatics/btac344
15. Krausová M., Ayeni K.I., Wisgrill L., Ezekiel Ch.N., Braun D., **Warth B.** (2022) Trace analysis of emerging and regulated mycotoxins in infant stool by LC-MS/MS, *Analytical and Bioanalytical Chemistry*, Dec. 21, 2021, DOI: 10.1007/s00216-021-03803-9
16. Place B.J., Ulrich E.M., Challis J.K., Chao A., Du B., Favela K., Feng Y.-L., Fisher Ch.M., Gardinali P., Hood A., Knolhoff A.M., McEachran A.D., Nason S.L., Newton S.R., Ng B., Nuñez J., Peter K.T., Phillips A.L., Quinete N., Renslow R., Sobus J.R., Sussman E.M., **Warth B.**, Wickramasekara S., Williams A.J. (2021) An Introduction to the Benchmarking and Publications for Non-Targeted Analysis Working Group, *Analytical Chemistry*, 93(49):16289-16296. doi: 10.1021/acs.analchem.1c02660.
17. Seki D., Mayer M., Hausmann B., Pjevac P., Giordano V., Goera K., Unterasinger L., Klebermaß-Schrehof K., De Paepe K., Van de Wiele T., Spittler A., Kasprian G., **Warth B.**, Berger A., Berry D., Wisgrill L. (2021) Aberrant gut-microbiota-immune-grain axis development in premature neonates with brain damage, *Cell Host & Microbe*, 29, DOI: 10.1016/j.chom.2021.08.004
18. Peter K.T., Phillips A.L., Knolhoff A.M., Gardinali P.R., Manzano C.A., Miller K.E., Pristner M., Sabourin L., Sumarah M.W., **Warth B.**, Sobus J.R. (2021) Nontargeted Analysis Study Reporting Tool: A Framework to Improve Research Transparency and Reproducibility, *Analytical Chemistry*, DOI: 10.1021/acs.analchem.1c02621
19. Cvak B., **Warth B.**, Atehnkeng J., Parich A., Moritz A., Sulyok M., Krska R. (2021) Evaluating the Performance of Lateral Flow Devices for Total Aflatoxins with Special Emphasis on Their Robustness under Sub-Saharan Conditions. *Toxins* 13, 742. doi: 10.3390/toxins13110742.
20. Aichinger G., Del Favero G., **Warth B.**, Marko D. (2021) Alternaria toxins-Still emerging? *Comprehensive Reviews in Food Science and Food Safety* 20, 4390. doi: 10.1111/1541-4337.12803.
21. Zhao F., Li L., Chen Y., Huang Y., Keerthisinghe Th. P., Chow A., Dong T., Jia S., Xing S., **Warth B.**, Huan T., Fang M. (2021) Risk-Based Chemical Ranking and Generating a Prioritized Human Exposome Database, *Environmental Health Perspectives*, 129(4):47014. doi: 10.1289/EHP7722
22. Crudo F., Aichinger G., Mihajlovic J., Varga E., Dellaflora L., **Warth B.**, Dall'Asta Ch., Berry D., Marko D. (2021) In vitro interactions of Alternaria mycotoxins, an emerging class of food contaminants, with the gut microbiota: a bidirectional relationship, *Archives of Toxicology*, doi.org/10.1007/s00204-021-03043-x
23. Oesterle I., Braun D., Berry D., Wisgrill L., Rempel A., **Warth B.** (2021) Polyphenol Exposure, Metabolism, and Analysis: A Global Exposomics Perspective, *Annual Review of Food Science and Technology*, doi: 10.1146/annurev-food-062220-090807
24. Braun D, Eiser M, Puntischer H, Marko D, **Warth B** (2021) Natural Contaminants in Infant Food: The Case of Regulated and Emerging Mycotoxins. *Food Control* 123, 107676.

25. Beisl J., Varga E., Braun D., **Warth B.**, Ehling-Schulz M., Del Favero G., Marko D. (2021) Assessing Mixture Effects of Cereulide and Deoxynivalenol on Intestinal Barrier Integrity and Uptake in Differentiated Human Caco-2 Cells, *Toxins*, DOI: 10.3390/toxins13030189
26. Akinyemi M. O., Ayeni K. I., Ogunremi O. R., Adeleke R. A., Oguntinyinbo F. A., **Warth B.**, Ezekiel C. N. (2021) A review of microbes and chemical contaminants in dairy products in sub-Saharan Africa, *Comprehensive Reviews in Food Science and Food Safety*, 20(2):1188-1220, doi: 10.1111/1541-4337.12712.
27. Pristner M and **Warth B** (2020) Drug-exposome interactions: The next frontier in precision medicine. *Trends in Pharmacological Sciences* 41, 12, 994-1005.
28. Pereira F, Wasmund K, Cobankovic I, Jehmlich N, Herbold C, Soo Lee K, Sziranyi B, Vesely C, Decker T, Stocker R, **Warth B**, von Bergen M, Wagner M, Berry D (2020) Rational design of a microbial consortium of mucosal sugar utilizers reduces *Clostridiodes difficile* colonization. *Nature Communications* 9, 5104.
29. Braun D, Schernhammer E, Marko D, **Warth B** (2020) Longitudinal Assessment of Mycotoxin Co-Exposures in Exclusively Breastfed Infants, *Environment International* 17, 142, 105845.
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Explanatory note: For papers published before 2015 only the first three authors are stated and W.B. was put to the third position if more than 4 authors