

Reference list of Dr. Britta Spanier

2021 – 2023

Sänger PA, Knüpfer M, Kegel M, **Spanier B**, Liebler-Tenorio EM, Fuchs TM. Regulation and Functionality of a Holin/Endolysin Pair Involved in Killing of *Galleria mellonella* and *Caenorhabditis elegans* by *Yersinia enterocolitica*. *Appl Environ Microbiol*. 2023 Jun 28;89(6):e0003623. doi: 10.1128/aem.00036-23.

Spanier B, Laurençon A, Weiser A, Pujol N, Omi S, Barsch A, Korf A, Meyer SW, Ewbank JJ, Paladino F, Garvis S, Aguilaniu H, Witting M. Comparison of lipidome profiles of *Caenorhabditis elegans*-results from an inter-laboratory ring trial. *Metabolomics*. 2021 Feb 17;17(3):25. doi: 10.1007/s11306-021-01775-6.

2018 - 2020

Jarzab A, Kurzawa N, Hopf T, Moerch M, Zecha J, Leijten N, Bian Y, Musiol E, Maschberger M, Stoehr G, Becher I, Daly C, Samaras P, Mergner J, **Spanier B**, Angelov A, Werner T, Bantscheff M, Wilhelm M, Klingenspor M, Lemeer S, Liebl W, Hahne H, Savitski MM, Kuster B. Meltome atlas-thermal proteome stability across the tree of life. *Nat Methods*. 2020 Apr 13. doi: 10.1038/s41592-020-0801-4

Rohm F, Daniel H, **Spanier B**. Transport Versus Hydrolysis: Reassessing Intestinal Assimilation of Di- and Tripeptides by LC-MS/MS Analysis. *Mol Nutr Food Res*. 2019 Nov;63(21):e1900263. doi: 10.1002/mnfr.201900263.

Spanier B, Lang R, Weber D, Lechner A, Thoma T, Rothner M, Petzold K, Lang T, Beusch A, Bösl M, Schlagbauer V, Daniel H, Hofmann T. Bioavailability and Biological Effects of 2- O- β -d-Glucopyranosyl-carboxyatractyligenin from Green Coffee in *Caenorhabditis elegans*. *J Agric Food Chem*. 2019 May 1;67(17):4774-4781. doi: 10.1021/acs.jafc.8b06785.

Spanier B, Wallwitz J, Zapoglou D, Idrissou BMG, Fischer C, Troll M, Petzold K, Daniel H. The Reproduction Rate of Peptide Transporter PEPT-1 Deficient *C. elegans* Is Dependent on Dietary Glutamate Supply. *Front Mol Biosci*. 2018 Nov 30;5:109. doi: 10.3389/fmolb.2018.00109.

Rohm F, Skurk T, Daniel H, **Spanier B**. Appearance of Di- and Tripeptides in Human Plasma after a Protein Meal Does Not Correlate with PEPT1 Substrate Selectivity. *Mol Nutr Food Res*. 2019 Mar;63(5):e1801094. doi: 10.1002/mnfr.201801094.

Weiser A, Giesbertz P, Daniel H, **Spanier B**. Acylcarnitine Profiles in Plasma and Tissues of Hyperglycemic NZO Mice Correlate with Metabolite Changes of Human Diabetes. *J Diabetes Res*. 2018 Apr 26;2018:1864865. doi: 10.1155/2018/1864865.

Giller K, Drews B, Berard J, Kienberger H, Schmicke M, Frank J, **Spanier B**, Daniel H, Geisslinger G, Ulbrich SE. Bovine embryo elongation is altered due to maternal fatty acid supplementation. *Biol Reprod*. 2018 Sep 1;99(3):600-610. doi: 10.1093/biolre/iy084.

2014 – 2017

Neuhaus K, Lamparter MC, Zölch B, Landstorfer R, Simon S, **Spanier B**, Ehrmann MA, Vogel RF. Probiotic *Enterococcus faecalis* Symbioflor[®] down regulates virulence genes of EHEC in vitro and decrease pathogenicity in a *Caenorhabditis elegans* model. *Arch Microbiol*. 2017 Mar;199(2):203-213. doi: 10.1007/s00203-016-1291-8.

Giesbertz P, Ecker J, Haag A, **Spanier B**, Daniel H. An LC-MS/MS method to quantify acylcarnitine species including isomeric and odd-numbered forms in plasma and tissues. *J Lipid Res.* 2015 Oct;56(10):2029-39. doi: 10.1194/jlr.D061721.

Giesbertz P, Padberg I, Rein D, Ecker J, Höfle AS, **Spanier B**, Daniel H. Metabolite profiling in plasma and tissues of ob/ob and db/db mice identifies novel markers of obesity and type 2 diabetes. *Diabetologia.* 2015 Sep;58(9):2133-43. doi: 10.1007/s00125-015-3656-y.

Geillinger KE, Kuhlmann K, Eisenacher M, Giesbertz P, Meyer HE, Daniel H, **Spanier B**. Intestinal amino acid availability via PEPT-1 affects TORC1/2 signaling and the unfolded protein response. *J Proteome Res.* 2014 Aug 1;13(8):3685-92. doi: 10.1021/pr5002669.

2010 -2013

Kottra G, **Spanier B**, Verri T, Daniel H. Peptide transporter isoforms are discriminated by the fluorophore-conjugated dipeptides β -Ala- and d-Ala-Lys-N-7-amino-4-methylcoumarin-3-acetic acid. *Physiol Rep.* 2013 Dec 8;1(7):e00165. doi: 10.1002/phy2.165.

Geillinger KE, Kipp AP, Schink K, Röder PV, **Spanier B**, Daniel H. Nrf2 regulates the expression of the peptide transporter PEPT1 in the human colon carcinoma cell line Caco-2. *Biochim Biophys Acta.* 2014 Jun;1840(6):1747-54. doi: 10.1016/j.bbagen.2013.12.026.

Kolodziejczak D, **Spanier B**, Pais R, Kraiczy J, Stelzl T, Gedrich K, Scherling C, Zietek T, Daniel H. Mice lacking the intestinal peptide transporter display reduced energy intake and a subtle maldigestion/malabsorption that protects them from diet-induced obesity. *Am J Physiol Gastrointest Liver Physiol.* 2013 May 15;304(10):G897-907. doi: 10.1152/ajpgi.00160.2012.

Soukup ST, **Spanier B**, Grünz G, Bunzel D, Daniel H, Kulling SE. Formation of phosphoglycosides in *Caenorhabditis elegans*: a novel biotransformation pathway. *PLoS One.* 2012;7(10):e46914. doi: 10.1371/journal.pone.0046914.

Geillinger KE, Kuhlmann K, Eisenacher M, Meyer HE, Daniel H, **Spanier B**. Dynamic changes of the *Caenorhabditis elegans* proteome during ontogenesis assessed by quantitative analysis with 15N metabolic labeling. *J Proteome Res.* 2012 Sep 7;11(9):4594-604. doi: 10.1021/pr300385v.

Grünz G, Haas K, Soukup S, Klingenspor M, Kulling SE, Daniel H, **Spanier B**. Structural features and bioavailability of four flavonoids and their implications for lifespan-extending and antioxidant actions in *C. elegans*. *Mech Ageing Dev.* 2012 Jan;133(1):1-10. doi: 10.1016/j.mad.2011.11.005.

Benner J, Daniel H, **Spanier B**. A glutathione peroxidase, intracellular peptidases and the TOR complexes regulate peptide transporter PEPT-1 in *C. elegans*. *PLoS One.* 2011;6(9):e25624. doi: 10.1371/journal.pone.0025624.

Martin FP, **Spanier B**, Collino S, Montoliu I, Kolmeder C, Giesbertz P, Affolter M, Kussmann M, Daniel H, Kochhar S, Rezzi S. Metabotyping of *Caenorhabditis elegans* and their culture media revealed unique metabolic phenotypes associated to amino acid deficiency and insulin-like signaling. *J Proteome Res.* 2011 Mar 4;10(3):990-1003. doi: 10.1021/pr100703a.

Spanier B, Starke M, Higel F, Scherer S, Fuchs TM. *Yersinia enterocolitica* infection and tcaA-dependent killing of *Caenorhabditis elegans*. *Appl Environ Microbiol.* 2010 Sep;76(18):6277-85. doi: 10.1128/AEM.01274-10.

Spanier B, Rubio-Aliaga I, Hu H, Daniel H. Altered signalling from germline to intestine pushes daf-2;pept-1 *Caenorhabditis elegans* into extreme longevity. *Aging Cell.* 2010 Aug;9(4):636-46. doi: 10.1111/j.1474-9726.2010.00591.x.

2003 - 2009

Spanier B, Lasch K, Marsch S, Benner J, Liao W, Hu H, Kienberger H, Eisenreich W, Daniel H. How the intestinal peptide transporter PEPT-1 contributes to an obesity phenotype in *Caenorhabditis elegans*. *PLoS One*. 2009 Jul 21;4(7):e6279. doi: 10.1371/journal.pone.0006279.

Spanier B, Stürzenbaum SR, Holden-Dye LM, Baumeister R. *Caenorhabditis elegans* neprilysin NEP-1: an effector of locomotion and pharyngeal pumping. *J Mol Biol*. 2005 Sep 16;352(2):429-37.

Leiers B, Kampkötter A, Grevelding CG, Link CD, Johnson TE, Henkle-Dührsen K. A stress-responsive glutathione S-transferase confers resistance to oxidative stress in *Caenorhabditis elegans*. *Free Radic Biol Med*. 2003 Jun 1;34(11):1405-15.

Kampkötter A, Volkmann TE, de Castro SH, **Leiers B**, Klotz LO, Johnson TE, Link CD, Henkle-Dührsen K. Functional analysis of the glutathione S-transferase 3 from *Onchocerca volvulus* (Ov-GST-3): a parasite GST confers increased resistance to oxidative stress in *Caenorhabditis elegans*. *J Mol Biol*. 2003 Jan 3;325(1):25-37.

Review articles

Spanier B, Rohm F. Proton Coupled Oligopeptide Transporter 1 (PepT1) Function, Regulation, and Influence on the Intestinal Homeostasis. *Compr Physiol*. 2018 Mar 25;8(2):843-869. doi: 10.1002/cphy.c170038. Review.

Spanier B. Transcriptional and functional regulation of the intestinal peptide transporter PEPT1. *J Physiol*. 2014 Mar 1;592(5):871-9. doi: 10.1113/jphysiol.2013.258889. Review.

Daniel H, **Spanier B**, Kottra G, Weitz D. From bacteria to man: archaic proton-dependent peptide transporters at work. *Physiology (Bethesda)*. 2006 Apr;21:93-102. Review.