

Archive – Publications of the Department

April – June 2023

- Bresgen N, Kovacs M, Lahnsteiner A**, Felder TK, **Rinnerthaler M**. The Janus-Faced Role of Lipid Droplets in Aging: Insights from the Cellular Perspective. *Biomolecules* 13(6). 2023.
- C AM, **Wessler S**, Ponnuraj K. Inhibition of *Listeria Monocytogenes* HtrA Protease with Camostat, Gabexate and Nafamostat Mesylates and the Binding Mode of the Inhibitors. *Protein J*: 1-12. 2023.
- Cosi V, **Gadermaier G**. The Role of Defensins as Pollen and Food Allergens. *Curr Allergy Asthma Rep* 23(6): 277-285. 2023.
- Fetahu IS, **Esser-Skala W, Dnyansagar R**, Sindelar S, Rifatbegovic F, Bileck A, Skos L, Bozsaky E, Lazic D, Shaw L, Totzl M, Tarlungeanu D, Bernkopf M, Rados M, Weninger W, Tomazou EM, Bock C, Gerner C, Ladenstein R, Farlik M, **Fortelny N**, Taschner-Mandl S. Single-cell transcriptomics and epigenomics unravel the role of monocytes in neuroblastoma bone marrow metastasis. *Nat Commun* 14(1): 3620. 2023.
- Fux AC, Casonato Melo C, **Michelini S, Swartzwelter BJ**, Neusch A, Italiani P, **Himly M**. Heterogeneity of Lipopolysaccharide as Source of Variability in Bioassays and LPS-Binding Proteins as Remedy. *Int J Mol Sci* 24(9). 2023.
- Gadermaier G**, Linhart B, Swoboda I. Editorial: Insights in allergology: 2021/22. *Front Allergy* 4: 1223904. 2023.
- Pena-Castellanos G**, Smith BRE, Pomes A, Smith SA, **Stigler MA, Widauer HL**, Versteeg SA, van Ree R, Chapman MD, **Aglas L**. Biological activity of human IgE monoclonal antibodies targeting Der p 2, Fel d 1, Ara h 2 in basophil mediator release assays. *Front Immunol* 14: 1155613. 2023.

January – March 2023

- Boraschi D, **Duschl A**, Lynch I, Stoeger T. Editorial: Exploring impacts of combined exposures to particles and chemicals on immune reactions across living organisms. *Front Toxicol* 5: 1148374. 2023.
- Creutzmacher R, Schulze-Niemand E, König P, **Stanojlovic V**, Mallagaray A, Peters T, Stein M, **Schubert M**. Conformational Control of Fast Asparagine Deamidation in a Norovirus Capsid Protein. *Biochemistry* 62(5): 1032-1043. 2023.
- Ernst AM, Steiner M, Kainz V, Tempfer H, Spitzer G, **Plank T**, Bauer HC, **Bresgen N**, Habenbacher A, Bauer H, Lipp AT. Lipedema: The use of cultured adipocytes for identification of diagnostic markers. *Plast Reconstr Surg*. 2023.
- Holzner C, Bottinger K, Blochl C, Huber CG, Dahms SO, Dall E, Brandstetter H**. Legumain Functions as a Transient TrkB Sheddase. *Int J Mol Sci* 24(6). 2023.
- Johnson L, Aglas L, Punz B, Dang HH, Christ C, Pointner L, Wenger M, Hofstaetter N, Hofer S, Geppert M, Andosch A, Ferreira F, Horejs-Hoeck J, Duschl A, Himly M**. Mechanistic insights into silica nanoparticle-allergen interactions on antigen presenting cell function in the context of allergic reactions. *Nanoscale* 15(5): 2262-2275. 2023.
- Pointner L**, Adamkova V, Bethanis A, Gerkhardt S, Moelter L, Traidl-Hoffmann C, Gilles S, **Aglas L**. Can birch pollen directly influence the IL-4/IL-4R interaction to modulate Th2 responses? *Allergy*. 2023.

Polak D, Vollmann U, Grilo J, Bogdanov IV, **Aglas L**, Ovchinnikova TV, **Ferreira F**, Bohle B. Bet v 1-independent sensitization to major allergens in Fagales pollen: Evidence at the T-cell level. *Allergy* 78(3): 743-751. 2023.

Urwanisch L, **Unger MS**, **Sieberger H**, **Dang HH**, **Neuper T**, **Regl C**, **Vetter J**, **Schaller S**, Winkler SM, Kerschbamer E, Weichenberger CX, **Krenn PW**, Luciano M, Pleyer L, Greil R, **Huber CG**, **Aberger F**, **Horejs-Hoeck J**. The Class IIA Histone Deacetylase (HDAC) Inhibitor TMP269 Downregulates Ribosomal Proteins and Has Anti-Proliferative and Pro-Apoptotic Effects on AML Cells. *Cancers (Basel)* 15(4). 2023.

October – December 2022

Alhayek A, Abdelsamie AS, **Schonauer E**, Camberlein V, **Hutterer E**, **Posselt G**, **Serwanja J**, **Blochl C**, **Huber CG**, Hauptenthal J, **Brandstetter H**, **Wessler S**, Hirsch AKH. Discovery and Characterization of Synthesized and FDA-Approved Inhibitors of Clostridial and Bacillary Collagenases. *J Med Chem* 65(19): 12933-12955. 2022.

Elamin T, **Brandstetter H**, **Dall E**. Legumain Activity Is Controlled by Extended Active Site Residues and Substrate Conformation. *Int J Mol Sci* 23(20). 2022.

Gögele C, Muller S, Belov S, Pradel A, Wiltzsch S, Lenhart A, Hornfeck M, Kerling V, Rubling A, Kuhl H, Schafer-Eckart K, Minnich B, **Weiger TM**, Schulze-Tanzil G. Biodegradable Poly(D-L-lactide-co-glycolide) (PLGA)-Infiltrated Bioactive Glass (CAR12N) Scaffolds Maintain Mesenchymal Stem Cell Chondrogenesis for Cartilage Tissue Engineering. *Cells* 11(9). 2022.

Hinterholzer A, **Moises J**, **Regl C**, Schwap S, Rapp E, **Huber CG**, **Schubert M**. Unambiguous identification of alpha-Gal epitopes in intact monoclonal antibodies by NMR spectroscopy. *MAbs* 14(1): 2132977. 2022.

Hofer S, **Hofstätter N**, **Punz B**, **Hasenkopf I**, **Johnson L**, **Himly M**. Immunotoxicity of nanomaterials in health and disease: Current challenges and emerging approaches for identifying immune modifiers in susceptible populations. *Wiley Interdiscip Rev Nanomed Nanobiotechnol* 14(6): e1804. 2022.

Hoppe IJ, Prommegger B, Uhl A, Lohrig U, **Huber CG**, **Brandstetter H**. The Fluorescent Enzyme Cascade Detects Low Abundance Protein Modifications Suitable for the Assembly of Functionally Annotated Modificatome Databases. *Chembiochem* 23(19): e202200399. 2022.

Moises JE, **Regl C**, **Hinterholzer A**, **Huber CG**, **Schubert M**. Unambiguous Identification of Glucose-Induced Glycation in mAbs and other Proteins by NMR Spectroscopy. *Pharm Res*. 2022.

Mullins M, **Himly M**, Llopis IR, Furxhi I, **Hofer S**, **Hofstatter N**, Wick P, Romeo D, Kuehnel D, Siivola K, Catalan J, und-Rinke K, Xiarchos I, Linehan S, Schuurbijs D, Bilbao AG, Barruetabena L, Drobne D. (Re)Conceptualizing decision-making tools in a risk governance framework for emerging technologies-the case of nanomaterials. *Environ Syst Decis*: 1-13. 2022.

Rathje F, **Klingler S**, **Aberger F**. Organoids for Modeling (Colorectal) Cancer in a Dish. *Cancers (Basel)* 14(21). 2022.

Schürz M, Danmayr J, **Jaritsch M**, **Klinglmayr E**, **Benirschke HM**, **Matea CT**, **Zimmerebner P**, Rauter J, Wolf M, Gomes FG, **Kratochvil Z**, Heger Z, Miller A, Heuser T, **Stanojlovic V**, **Kiefer J**, **Plank T**, **Johnson L**, **Himly M**, **Blöchl C**, **Huber CG**, Hintersteiner M, **Meisner-Kober N**. EVAnalyzer: High content imaging for rigorous characterisation of single extracellular vesicles using standard laboratory equipment and a new open-source ImageJ/Fiji plugin. *J Extracell Vesicles* 11(12): e12282. 2022.

July – September 2022

- Barbero F, **Michelini S**, Moriones OH, Patarroyo J, Rosell J, F Gusta M, Vitali M, Martin L, Canals F, **Duschl A**, **Horejs-Hoeck J**, Mondragon L, Bastus NG, Puentes V. Role of Common Cell Culture Media Supplements on Citrate-Stabilized Gold Nanoparticle Protein Corona Formation, Aggregation State, and the Consequent Impact on Cellular Uptake. *Bioconjug Chem* 33(8): 1505-1514. (2022).
- Elamin T**, **Santos NP**, **Briza P**, **Brandstetter H**, **Dall, E**. Structural and functional studies of legumain-mycocypin complexes revealed a competitive, exosite-regulated mode of interaction. *J Biol Chem*: 102502. (2022).
- Faltus, C, **Lahnsteiner A**, Barrdahl M, Assenov Y, Husing A, Bogatyrova O, Laplana M, Johnson T, Muley T, Meister M, Warth A, Thomas M, Plass C, Kaaks R, **Risch A**. Identification of NHLRC1 as a Novel AKT Activator from a Lung Cancer Epigenome-Wide Association Study (EWAS). *Int J Mol Sci* 23(18). (2022).
- Lutsch E**, **Struber A**, **Auer G**, Fessmann T, **Lepperdinger G**. A Poly-(ethylene glycol)-diacrylate 3D-Printed Micro-Bioreactor for Direct Cell Biological Implant-Testing on the Developing Chicken Chorioallantois Membrane. *Micromachines (Basel)* 13(8). (2022).
- Mullins M, **Himly M**, Llopis IR, Furxhi I, **Hofer S**, **Hofstatter N**, Wick P, Romeo, D, Kuehnel D, Siivola K, Catalan J, Hund-Rinke K, Xiarchos I, Linehan S, Schuurbiers D, Bilbao AG, Barruetabena L, Drobne, D. (Re)Conceptualizing decision-making tools in a risk governance framework for emerging technologies-the case of nanomaterials. *Environ Syst Decis*: 1-13. (2022).
- Samadi N, Koidl L, Salzmann M, Klems M, Komatitsch N, Schaffer D, Weidmann E, **Duschl A**, **Horejs-Hoeck J**, Untersmayr E. Food Allergen Nitration Enhances Safety and Efficacy of Oral Immunotherapy in Food Allergy. *Nutrients* 14(7). (2022).
- Schamschula E, **Lahnsteiner A**, Assenov Y, Hagmann W, Zaborsky N, **Wiederstein M**, Strobl A, Stanke F, Muley T, Plass C, Tummler B, **Risch A**. Disease-related blood-based differential methylation in cystic fibrosis and its representation in lung cancer revealed a regulatory locus in PKP3 in lung epithelial cells. *Epigenetics* 17(8): 837-860. (2022).
- Schmidhuber S, Scheiblhofer S, **Weiss R**, Cserepes M, Tovari J, **Gadermaier G**, Bezard E, De Giorgi F, Ichas F, Strunk D, Mandler M. A Novel C-Type Lectin Receptor-Targeted alpha-Synuclein-Based Parkinson Vaccine Induces Potent Immune Responses and Therapeutic Efficacy in Mice. *Vaccines (Basel)* 10(9). (2022).
- Tesanovic S, **Krenn PW**, **Aberger F**. Hedgehog/GLI signaling in hematopoietic development and acute myeloid leukemia-From bench to bedside. *Front Cell Dev Biol* 10: 944760. (2022).

April – June 2022

- Alhayek A, Khan ES, Schonauer E, Dainghaus T, Shafiei R, Voos K, Han MKL, Ducho C, Posselt G, Wessler S, Brandstetter H, Haupenthal J, Del CampoA, Hirsch, AKH. Inhibition of Collagenase Q1 of *Bacillus cereus* as a Novel Antivirulence Strategy for the Treatment of Skin-Wound Infections. *Adv Ther (Weinh)* 5(3): 2100222. (2022).
- Bolik J, Krause F, Stevanovic M, Gandrass M, Thomsen I, Schacht SS, Rieser E, Muller M, Schumacher N, Fritsch J, Wichert R, Galun E, Bergmann J, Roder C, Schafmayer C, Egberts JH, Becker-Pauly C, Saftig P, Lucius R, Schneider-Brachert W, Barikbin R, Adam D, Voss M, Hitzl W, Kruger A, Strilic B, Sagi I, Walczak H, Rose-John S, Schmidt-Arras D. Inhibition of ADAM17 impairs endothelial cell necroptosis and blocks metastasis." *J Exp Med* 219(1). (2022).
- Bottinger K, Esser-Skala W, Segl M, Herwig C, Huber CG. At-line quantitative profiling of monoclonal antibody products during bioprocessing using HPLC-MS. *Anal Chim Acta* 1207: 339813. (2022).

- Bresgen N. and Siems W. Peter Eckl: Research on the Pro-/Antioxidant Balance. *Antioxidants* (Basel) 11(6). (2022).
- Dahms SO, Schnapp G, Winter M, Buttner FH, Schleputz M, Gnam C, Pautsch A, Brandstetter H. Dichlorophenylpyridine-Based Molecules Inhibit Furin through an Induced-Fit Mechanism. *ACS Chem Biol* 17(4): 816-821. (2022).
- Dall E, Licht A, Brandstetter H. Production of Functional Plant Legumain Proteases Using the *Leishmania tarentolae* Expression System. *Methods Mol Biol* 2447: 35-51. (2022).
- Gogele C, Muller S, Belov S, Pradel A, Wiltzsch S, Lenhart A, Hornfeck M, Kerling V, Rubling A, Kuhl H, Schafer-Eckart K, Minnich B, Weiger TM, Schulze-Tanzil G. Biodegradable Poly(D-L-lactide-co-glycolide) (PLGA)-Infiltrated Bioactive Glass (CAR12N) Scaffolds Maintain Mesenchymal Stem Cell Chondrogenesis for Cartilage Tissue Engineering. *Cells* 11(9). (2022).
- Hamming C, Glueck M, Fefer M, Ckurshumova W, Liu J, Tenhaken R, Plaetzer K. Photodynamic Inactivation of plant pathogens part II: fungi. *Photochem Photobiol Sci* 21(2): 195-207. (2022).
- Krenn PW, Montanez E, Costell M, Fassler R. Integrins, anchors and signal transducers of hematopoietic stem cells during development and in adulthood. *Curr Top Dev Biol* 149: 203-261. (2022).
- Lima TSM, Souza W, Geaquinto LRO, Sanches PL, Stepien EL, Meneses J, Fernandez-de Gortari E, Meisner-Kober N, Himly M, Granjeiro JM, Ribeiro AR. Nanomaterial Exposure, Extracellular Vesicle Biogenesis and Adverse Cellular Outcomes: A Scoping Review. *Nanomaterials* (Basel) 12(7). (2022).
- Neuper T, Frauenlob T, Posselt G, Horejs-Hoeck J. Beyond the gastric epithelium - the paradox of *Helicobacter pylori*-induced immune responses. *Curr Opin Immunol* 76: 102208. (2022).
- Pertl-Obermeyer H, Gimeno A, Kuchler V, Servili E, Huang S, Fang H, Lang V, Sydow K, Pockl M, Schulze WX, Obermeyer G. pH modulates interaction of 14-3-3 proteins with pollen plasma membrane H⁺ ATPases independently from phosphorylation. *J Exp Bot* 73(1): 168-181. (2022).
- Punz B, Johnson L, Geppert M, Dang HH, Horejs-Hoeck J, Duschl A, Himly M. Surface Functionalization of Silica Nanoparticles: Strategies to Optimize the Immune-Activating Profile of Carrier Platforms. *Pharmaceutics* 14(5). (2022).

January – March 2022

- Bernegger S, Hutterer E, Zarzecka U, Schmidt TP, Huemer M, Widloither I, Posselt G, Skorko-Glonek J, Wessler S. E-Cadherin Orthologues as Substrates for the Serine Protease High Temperature Requirement A (HtrA). *Biomolecules* 12(3) (2022).
- Bernegger S, Jarzab M, Wessler S, Posselt G. Proteolytic Landscapes in Gastric Pathology and Cancerogenesis. *Int J Mol Sci* 23(5) (2022).
- Frauenlob T, Neuper T, Mehinagic M, Dang HH, Boraschi D, Horejs-Hoeck J. Helicobacter pylori Infection of Primary Human Monocytes Boosts Subsequent Immune Responses to LPS. *Front Immunol* 13: 847958 (2022).
- Gomes FG, Andrade AC, Wolf M, Hochmann S, Krisch L, Maeding N, Regl C, Poupardin R, Ebner-Peking P, Huber CG, Meisner-Kober N, Schallmoser K, Strunk D. Synergy of Human Platelet-Derived Extracellular Vesicles with Secretome Proteins Promotes Regenerative Functions. *Biomedicines* 10(2) (2022).
- Moazzam A, Stanojlovic V, Hinterholzer A, Holzner C, Roschger C, Zierer A, Wiederstein M, Schubert M, Cabrele C. Backbone distortions in lactam-bridged helical peptides. *J Pept Sci*: e3400 (2022).
- Neuper T, Weiss R, Horejs-Hoeck J. Ripping the Ripoptosome: a novel path for blocking allergic inflammation? *Cell Mol Immunol* 19(2): 136-138 (2022).
- Struber A, Auer G, Fischlechner M, Wickstrom C, Reiter L, Lutsch E, Simon-Nobbe B, Marozin S, Lepperdinger G. Low-Cost Devices for Three-Dimensional Cell Aggregation, Real-Time Monitoring Microscopy, Microfluidic Immunostaining, and Deconvolution Analysis. *Bioengineering (Basel)* 9(2) (2022).

October – December 2021

- Agatha S, Bartel H. A Comparative Ultrastructural Study of Tintinnid Loricae (Alveolata, Ciliophora, Spirotricha) and a Hypothesis on their Evolution. *J Eukaryot Microbiol*: e12877 (2021).
- Althammer M, Regl C, Herburger K, Blochl C, Voglas E, Huber CG, Tenhaken R. Overexpression of UDP-sugar pyrophosphorylase leads to higher sensitivity towards galactose, providing new insights into the mechanisms of galactose toxicity in plants. *Plant J* (2021).
- Bartels A, Berninger UG, Hohenberger F, Wickham S, Petermann JS. Littoral macroinvertebrate communities of alpine lakes along an elevational gradient (Hohe Tauern National Park, Austria). *PLoS One* 16(11): e0255619 (2021).
- Blochl C, Wang D, Madunic K, Lageveen-Kammeijer GSM, Huber CG, Wuhrer M, Zhang T. Integrated N- and O-Glycomics of Acute Myeloid Leukemia (AML) Cell Lines. *Cells* 10(11) (2021).
- Dall E, Stanojlovic V, Demir F, Briza P, Dahms SO, Huesgen PF, Cabrele C, Brandstetter H. The Peptide Ligase Activity of Human Legumain Depends on Fold Stabilization and Balanced Substrate Affinities. *ACS Catal* 11(19): 11885-11896 (2021).
- Gfrerer E, Laina D, Gibernau M, Fuchs R, Happ M, Tolasch T, Trutschnig W, Horger AC, Comes HP, Dotterl S. Floral Scents of a Deceptive Plant Are Hyperdiverse and Under Population-Specific Phenotypic Selection. *Front Plant Sci* 12: 719092 (2021).

- Gogele C, Wiltzsch S, Lenhart A, Civilleri A, Weiger TM, Schafer-Eckart K, Minnich B, Forchheimer L, Hornfeck M, Schulze-Tanzil G. Highly porous novel chondro-instructive bioactive glass scaffolds tailored for cartilage tissue engineering. *Mater Sci Eng C Mater Biol Appl* 130: 112421 (2021).
- Hofstatter N, Hofer S, Duschl A, Himly M. Children's Privilege in COVID-19: The Protective Role of the Juvenile Lung Morphometry and Ventilatory Pattern on Airborne SARS-CoV-2 Transmission to Respiratory Epithelial Barriers and Disease Severity. *Biomedicines* 9(10) (2021).
- Johnson L, Aglas L, Soh WT, Geppert M, Hofer S, Hofstatter N, Briza P, Ferreira F, Weiss R, Brandstetter H, Duschl A, Himly M. Structural Alterations of Antigens at the Material Interface: An Early Decision Toolbox Facilitating Safe-by-Design Nanovaccine Development. *Int J Mol Sci* 22(19) (2021).
- Kovacs M, Geltinger F, Verwanger T, Weiss R, Richter K, Rinnerthaler M. Lipid Droplets Protect Aging Mitochondria and Thus Promote Lifespan in Yeast Cells. *Front Cell Dev Biol* 9: 774985 (2021).
- Mills-Goodlet R, Johnson L, Hoppe IJ, Regl C, Geppert M, Schenck M, Huber S, Hauser M, Ferreira F, Husing N, Huber CG, Brandstetter H, Duschl A, Himly M. The nanotopography of SiO₂ particles impacts the selectivity and 3D fold of bound allergens. *Nanoscale* 13(48): 20508-20520 (2021).
- Petermann JS, Buzhdygan OY. Grassland biodiversity. *Curr Biol* 31(19): R1195-R1201 (2021).
- Radhakrishnan D, M CA, Hutterer E, Wessler S, Ponnuraj K. High Temperature Requirement A (HtrA) protease of *Listeria monocytogenes* and its interaction with extracellular matrix molecules. *FEMS Microbiol Lett* 368(20) (2021).
- Stanojlovic V, Muller A, Moazzam A, Hinterholzer A, Ozga K, Berlicki L, Schubert M, Cabrele C. A Conformationally Stable Acyclic beta-Hairpin Scaffold Tolerating the Incorporation of Poorly beta-Sheet-Prone Amino Acids. *Chembiochem* (2021).
- Swartzwelter BJ, Michelini S, Frauenlob T, Barbero F, Verde A, De Luca AC, Puentes V, Duschl A, Horejs-Hoeck J, Italiani P, Boraschi D. Innate Memory Reprogramming by Gold Nanoparticles Depends on the Microbial Agents That Induce Memory. *Front Immunol* 12: 751683 (2021).

July – September 2021

- Agatha S, Ganser MH, Santoferrara LF. The importance of type species and their correct identification: A key example from tintinnid ciliates (Alveolata, Ciliophora, Spirotricha). *J Eukaryot Microbiol*: e12865 (2021).
- Bauer J, Cuvelier N, Ragab N, Simon-Keller K, Nitzki F, Geyer N, Botermann DS, Elmer DP, Rosenberger A, Rando TA, Biressi S, Fagin JA, Saur D, Dullin C, Schildhaus HU, Schulz-Schaeffer W, Aberger F, Uhmann A, Hahn H. Context-dependent modulation of aggressiveness of pediatric tumors by individual oncogenic RAS isoforms. *Oncogene* 40(31): 4955-4966 (2021).
- Boehm A, Luger AK, Schmitz K, Cima K, Patscheider DH, Augustin F, Jakob LM, Obermayer A, Weiss G, Stoiber W, Widmann G, Loeffler-Ragg J. A spark of hope: histopathological and functional recovery after critical COVID-19. *Infection* (2021).
- Breunig S, Wallner V, Kobler K, Wimmer H, Steinbacher P, Streubel MK, Bischof J, Duschl J, Neuhofer C, Gruber W, Aberger F, Breitenbach M, Russe E, Wechselberger G, Duranton A, Richter K, Rinnerthaler M. The life in a gradient: calcium, the lncRNA SPRR2C and mir542/mir196a meet in the epidermis to regulate the aging process. *Aging (Albany NY)* 13(15): 19127-19144 (2021).

- Burger H, Marquardt M, Babucke K, Heuel KC, Ayasse M, Dotterl S, Galizia CG. Neural and behavioural responses of the pollen-specialist bee *Andrena vaga* to *Salix* odours. *J Exp Biol* 224(13) (2021).
- Dahms SO, Haider T, Klebe G, Steinmetzer T, Brandstetter H. OFF-State-Specific Inhibition of the Proprotein Convertase Furin. *ACS Chem Biol* 16(9): 1692-1700 (2021).
- Di Marco F, Berger T, Esser-Skala W, Rapp E, Regl C, Huber CG. Simultaneous Monitoring of Monoclonal Antibody Variants by Strong Cation-Exchange Chromatography Hyphenated to Mass Spectrometry to Assess Quality Attributes of Rituximab-Based Biotherapeutics. *Int J Mol Sci* 22(16) (2021).
- Felhofer M, Mayr K, Lutz-Meindl U, Gierlinger N. Raman imaging of *Micrasterias*: new insights into shape formation. *Protoplasma* (2021).
- Geppert M, Himly M. Iron Oxide Nanoparticles in Bioimaging - An Immune Perspective. *Front Immunol* 12: 688927 (2021).
- Goodyear-Smith F, Schabetsberger R. *Gonococcus* infection probably acquired from bathing in a natural thermal pool: a case report. *J Med Case Rep* 15(1): 458 (2021).
- Hadziomerovic N, Avdic R, Minnich B, Erlbacher K, Mlaco N, Tandir F, Bejdic P. 3D morphometric study of domestic fowl glomerulus-A scanning electron microscope study of vascular corrosion casts. *Anat Histol Embryol* 50(3): 678-682 (2021).
- Heiduk A, Meve U, Menzel F, Haenni JP, Tschirnhaus MV, Dotterl S, Johnson SD. Fly Pollination of Kettle Trap Flowers of *Riocreuxiatorulosa* (Ceropegieae-Anisotominae): A Generalized System of Floral Deception. *Plants (Basel)* 10(8) (2021).
- Holzinger A, Obwegeser S, Andosch A, Karsten U, Oppermann C, Ruth W, van de Meene A, Goodman CD, Lutz-Meindl U, West JA. The red alga *Tsunamia transpacific* (Stylonematophyceae) from plastic drift shows adaptation to its uncommon habitat in ultrastructure and soluble low molecular weight carbohydrate composition. *Protoplasma* (2021).
- Junker RR, He X, Otto JC, Ruiz-Hernandez V, Hanusch M. Divergent assembly processes: a comparison of the plant and soil microbiome with plant communities in a glacier forefield. *FEMS Microbiol Ecol.* (2021).
- Kohlberger M, Gadermaier G. SELEX: Critical factors and optimization strategies for successful aptamer selection. *Biotechnol Appl Biochem* (2021).
- Lackner P, Wiederstein M. Protein Structure Analysis and Prediction with Statistical Scoring Functions. *Int J Mol Sci* 22(16) (2021).
- Lebede M, Di Marco F, Esser-Skala W, Hennig R, Wohlschlager T, Huber CG. Exploring the Chemical Space of Protein Glycosylation in Noncovalent Protein Complexes: An Expedition along Different Structural Levels of Human Chorionic Gonadotropin by Employing Mass Spectrometry. *Anal Chem* 93(30): 10424-10434 (2021).
- Lukic D, Eberle J, Thormann J, Holzschuh C, Ahrens D. "Excluding spatial sampling bias does not eliminate oversplitting in DNA-based species delimitation analyses. *Ecol Evol* 11(15): 10327-10337 (2021).
- Maria VL, Licha D, Scott-Fordsmand JJ, Huber CG, Amorim MJB. Multiomics assessment in *Enchytraeus crypticus* exposed to Ag nanomaterials (Ag NM300K) and ions (AgNO₃) - Metabolomics, proteomics (& transcriptomics). *Environ Pollut* 286: 117571 (2021).

- Milet-Pinheiro P, Santos PSC, Prieto-Benitez S, Ayasse M, Dotterl S. Differential Evolutionary History in Visual and Olfactory Floral Cues of the Bee-Pollinated Genus *Campanula* (Campanulaceae). *Plants (Basel)* 10(7) (2021).
- More M, Soteras F, Ibanez AC, Dotterl S, Cocucci AA, Raguso RA. Floral Scent Evolution in the Genus *Jaborosa* (Solanaceae): Influence of Ecological and Environmental Factors. *Plants (Basel)* 10(8) (2021).
- Obermayer A, Jakob LM, Haslbauer JD, Matter MS, Tzankov A, Stoiber W. Neutrophil Extracellular Traps in Fatal COVID-19-Associated Lung Injury. *Dis Markers* 2021: 5566826 (2021).
- Oprsal J, Knotek P, Zickler GA, Sigg L, Schirmer K, Pouzar M, Geppert M. Cytotoxicity, Accumulation and Translocation of Silver and Silver Sulfide Nanoparticles in contact with Rainbow Trout Intestinal Cells. *Aquat Toxicol* 237: 105869 (2021).
- Peer E, Aichberger SK, Vilotic F, Gruber W, Parigger T, Grund-Groschke S, Elmer DP, Rathje F, Ramspacher A, Zaja M, Michel S, Hamm S, Aberger F. Casein Kinase 1D Encodes a Novel Drug Target in Hedgehog-Gli-Driven Cancers and Tumor-Initiating Cells Resistant to SMO Inhibition. *Cancers (Basel)* 13(16) (2021).
- Pertl-Obermeyer H, Gimeno A, Kuchler V, Servili E, Huang S, Fang H, Lang V, Sydow K, Pockl M, Schulze WX, Obermeyer G. pH modulates interaction of 14-3-3s with pollen PM H⁺ ATPases independently from phosphorylation. *J Exp Bot* (2021).
- Pointner LN, Ferreira F, Aglas L. B Cell Functions in the Development of Type I Allergy and Induction of Immune Tolerance. *Handb Exp Pharmacol* (2021).
- Ritter M, Bresgen N, Kerschbaum HH. From Pinocytosis to Methuosis-Fluid Consumption as a Risk Factor for Cell Death. *Front Cell Dev Biol* 9: 651982 (2021).
- Ruiz-Hernandez V, Joubert L, Rodriguez-Gomez A, Artuso S, Patrick JG, Gomez PA, Eckerstorfer S, Brandauer SS, Trcka-Rojas CGI, Martinez-Reina L, Booth J, Lau-Zhu A, Weiss J, Bielza P, Glover BJ, Junker RR, Egea-Cortines M. Humans Share More Preferences for Floral Phenotypes With Pollinators Than With Pests. *Front Plant Sci* 12: 647347 (2021).
- Schallmoser A, Bakjaji F, Konigsberger S, John J, Farber C, Schmidt E, Breitenbach-Koller H, Allam JP, Verguts J, Sanger N. Effect of mild alpha-chymotrypsin treatment of highly viscous semen samples on fertilization rates. *Transl Androl Urol* 10(1): 448-454 (2021).
- Scheibelhofer S, Drothler S, Braun W, Braun R, Boesch M, Weiss R. Laser-facilitated epicutaneous immunization of mice with SARS-CoV-2 spike protein induces antibodies inhibiting spike/ACE2 binding. *Vaccine* 39(32): 4399-4403 (2021).
- Scheibelhofer S, Drothler S, Braun W, Braun R, Boesch M, Weiss R. Laser facilitated epicutaneous peptide immunization using dry patch technology. *Vaccine* 39(37): 5259-5264 (2021).
- Steiner P, Buchner O, Andosch A, Holzinger A, Lutz-Meindl U, Neuner G. Winter survival of the unicellular green alga *Micrasterias denticulata*: insights from field monitoring and simulation experiments. *Protoplasma* (2021).
- Vadivel K, Schmidt AE, Cascio D, Padmanabhan K, Krishnaswamy S, Brandstetter H, Bajaj SP. Structure of human factor VIIa-soluble tissue factor with calcium, magnesium and rubidium. *Acta Crystallogr D Struct Biol* 77(Pt 6): 809-819 (2021).
- Vannette RL, Junker RR. Editorial overview: Tripartite interactions: microbial influencers of plant-pollinator interactions. *Curr Opin Insect Sci* 44: A1-A2 (2021).

Welponer T, Prodinger C, Pinon-Hofbauer J, Hintersteininger A, Breitenbach-Koller H, Bauer JW, Laimer M. Clinical Perspectives of Gene-Targeted Therapies for Epidermolysis Bullosa *Dermatol Ther (Heidelb)* 11(4): 1175-1197 (2021).

Wenger M, Bethanis A, Johnson L, Aglas L. Humanized Mediator Release Assay as a Read-Out for Allergen Potency. *J Vis Exp*(172) (2021).

Zissler A, Stoiber W, Geissenberger J, Steinbacher P, Monticelli FC, Pittner S. Influencing Factors on Postmortem Protein Degradation for PMI Estimation: A Systematic Review. *Diagnostics (Basel)* 11(7) (2021).

April – June 2021

Elsasser B, Goettig P. Mechanisms of Proteolytic Enzymes and Their Inhibition in QM/MM Studies. *Int J Mol Sci* 22(6) (2021).

Geissenberger J, Ehrenfellner B, Monticelli, FC, Pittner S, Steinbacher P. Dismembered porcine limbs as a proxy for postmortem muscle protein degradation. *Int J Legal Med* 135(4): 1627-1636 (2021).

Hofer S, Hofstatter N, Duschl A, Himly M. SARS-CoV-2-Laden Respiratory Aerosol Deposition in the Lung Alveolar-Interstitial Region Is a Potential Risk Factor for Severe Disease: A Modeling Study. *J Pers Med* 11(5) (2021).

Junker RR, Eisenhauer N, Schmidt A, Turke M. Invertebrate decline reduces bacterial diversity associated with leaves and flowers. *FEMS Microbiol Ecol* (2021).

Kerschbaum HH, Tasa BA, Schurz M, Oberascher K, Bresgen N. Trypan Blue - Adapting a Dye Used for Labelling Dead Cells to Visualize Pinocytosis in Viable Cells. *Cell Physiol Biochem* 55(S1): 171-184 (2021).

Klasen M, Ahrens D, Eberle J, Steinhage V. Image-based Automated Species Identification: Can Virtual Data Augmentation Overcome Problems of Insufficient Sampling? *Syst Biol* (2021).

Lam van TV, Heindl MR, Schlutt C, Bottcher-Friebertshauser, E, Bartenschlager R, Klebe G, Brandstetter H, Dahms SO, Steinmetzer T. The Basicity Makes the Difference: Improved Canavanine-Derived Inhibitors of the Proprotein Convertase Furin. *ACS Med Chem Lett* 12(3): 426-432 (2021).

Lametschwandtner A, Spornitz U, Minnich B. Microvascular anatomy of the non-lobulated liver of adult *Xenopus laevis*: A scanning electron microscopic study of vascular casts. *Anat Rec (Hoboken)* (2021).

Litschko C, Budde I, Berger M, Bethe A, Schulze J, Alcalá Orozco EA, Mahour R, Goettig P, Fuhring JJ, Rexer T, Gerardy-Schahn R, Schubert M, Fiebig T. Mix-and-Match System for the Enzymatic Synthesis of Enantiopure Glycerol-3-Phosphate-Containing Capsule Polymer Backbones from *Actinobacillus pleuropneumoniae*, *Neisseria meningitidis*, and *Bibersteinia trehalosi*. *mBio*: e0089721 (2021).

Marozin S, Simon-Nobbe B, Irausek S, Chung LWK, Lepperdinger G. Kinship of conditionally immortalized cells derived from fetal bone to human bone-derived mesenchymal stroma cells. *Sci Rep* 11(1): 10933 (2021).

Michelini S, Barbero F, Prinelli A, Steiner P, Weiss R, Verwanger T, Andosch A, Lutz-Meindl U, Puentes V F, Drobne D, Duschl A, Horejs-Hoeck J. Gold nanoparticles (AuNPs) impair LPS-driven immune responses by promoting a tolerogenic-like dendritic cell phenotype with altered endosomal structures. *Nanoscale* 13(16): 7648-7666 (2021).

- Pinheiro CS, Silva ES, de Andrade Belitardo EMM, Pacheco LGC, Aguiar E, Alcantara-Neves NM, Gadermaier G, Ferreira F. En route to personalized medicine: uncovering distinct IgE reactivity pattern to house dust mite components in Brazilian and Austrian allergic patients. *Clin Transl Allergy* 11(1): e12004 (2021).
- Rathner A, Rathner P, Friedrich A, Wiessner M, Kitzler CM, Schernthaner J, Karl T, Krauss J, Lottspeich F, Mewes W, Hintner H, Bauer JW, Breitenbach M, Muller N, Breitenbach-Koller H, von Hagen J. Drug Development for Target Ribosomal Protein rpL35/uL29 for Repair of LAMB3R635X in Rare Skin Disease Epidermolysis Bullosa. *Skin Pharmacol Physiol*: 1-16 (2021).
- Sladeczek FXJ, Dotterl S, Schaffler I, Segar ST, Konvicka M. Succession of Dung-Inhabiting Beetles and Flies Reflects the Succession of Dung-Emitted Volatile Compounds. *J Chem Ecol* 47(4-5): 433-443 (2021).
- Vitkov L, Munoz LE, Knopf J, Schauer C, Oberthaler H, Minnich B, Hannig M, Herrmann M. Connection between Periodontitis-Induced Low-Grade Endotoxemia and Systemic Diseases: Neutrophils as Protagonists and Targets. *Int J Mol Sci* 22(9) (2021).

January – March 2021

- Agatha S, Utz LRP, Zufall RA, Warren A. Symposium on Ciliates in Memory of Denis Lynn. *Eur J Protistol* 78: 125694 (2021).
- Buchholz F, Junker R, Samad A, Antonielli L, Saric N, Kostic T, Sessitsch A, Mitter B. 16S rRNA gene-based microbiome analysis identifies candidate bacterial strains that increase the storage time of potato tubers. *Sci Rep* 11(1): 3146 (2021).
- Felder T, Geltinger F, Rinnerthaler M. Lipid droplets meet aging. *Aging (Albany NY)* (2021).
- Grilo J, Kitzmuller, C, Aglas L, Sanchez Acosta G, Vollmann U, Ebner C, Horak F, Kinaciyan T, Radauer C, Ferreira F, Jahn-Schmid B, Bohle B. IgE-cross-blocking antibodies to Fagales following sublingual immunotherapy with recombinant Bet v 1. *Allergy* (2021).
- Hinterholzer A, Stanojlovic V, Regl C, Huber CG, Cabrele C, Schubert M. Detecting aspartate isomerization and backbone cleavage after aspartate in intact proteins by NMR spectroscopy. *J Biomol NMR* 75(1): 71-82 (2021).
- Hoppe IJ, Brandstetter H, Schönauer E. Biochemical characterisation of a collagenase from *Bacillus cereus* strain Q1. *Sci Rep* 11(1): 4187 (2021).
- Huber S, Gadermaier G, Bohle B, Ferreira F, Briza P. Proteomic profiling of commercial dust mite skin prick test solutions and allergy vaccines from India. *World Allergy Organ J* 14(3): 100516 (2021).
- Huber S, Lang R, Asam C, Ferreira F, Hawranek T, Gadermaier G. High-affinity Bet v 1-specific secretory IgA antibodies in nasal fluids protect against birch pollen allergy. *Allergy* (2021).
- Lam van TV, Heindl MR, Schlutt C, Bottcher-Friebertshauser E, Bartenschlager R, Klebe G, Brandstetter H, Dahms SO, Steinmetzer T. Drought-induced reduction in flower size Improved Canavanine-Derived Inhibitors of the Proprotein Convertase Furin. *ACS Med Chem Lett* 12(3): 426-432 (2021).
- Lametschwandtner A, Minnich B. Microvascular anatomy of the urinary bladder in the adult African clawed toad, *Xenopus laevis*: A scanning electron microscope study of vascular casts. *J Morphol* 282(3): 368-377 (2021).

- Ninmanont P, Wongchai C, Pfeiffer W, Chaidee A. Salt stress of two rice varieties: root border cell response and multi-logistic quantification. *Protoplasma* (2021).
- Pflugbeil G, Affenzeller M, Tribsch A, Comes HP. Primary hybrid zone formation in *Tephrosia helenitis* (Asteraceae), following postglacial range expansion along the central Northern Alps. *Mol Ecol* 30(7): 1704-1720 (2021).
- Platts-Mills TA, Hilger C, Jappe U, Hage M, Gadermaier G, Spillner E, JonasLidholm, Keshavarz B, Aalberse RC, Van Ree R, Goodman RE, Pomes A. Carbohydrate Epitopes Currently Recognized as Targets for IgE Antibodies. *Allergy* (2021).
- Shaidullov I, Ermakova E, Gaifullina A, Mosshammer A, Yakovlev A, Weiger TM, Hermann A, Sitdikova G. Alcohol metabolite acetic acid activates BK channels in a pH-dependent manner and decreases calcium oscillations and exocytosis of secretory granules in rat pituitary GH3 cells. *Pflugers Arch* 473(1): 67-77 (2021).
- Sommer A, Hoefftberger M, Foissner I. Fluid-phase and membrane markers reveal spatio-temporal dynamics of membrane traffic and repair in the green alga *Chara australis*. *Protoplasma* (2021).
- Stamm P, Etl F, Maia ACD, Dotterl S, Schulz S. Synthesis, Absolute Configurations, and Biological Activities of Floral Scent Compounds from Night-Blooming Araceae. *J Org Chem* (2021).
- Tripolt S, Neubauer HA, Knab VM, Elmer DP, Aberger F, Moriggl R, Fux DA. Opioids drive breast cancer metastasis through the delta-opioid receptor and oncogenic STAT3. *Neoplasia* 23(2): 270-279 (2021).
- Urwanisch L, Luciano M, Horejs-Hoeck J. The NLRP3 Inflammasome and Its Role in the Pathogenicity of Leukemia. *Int J Mol Sci* 22(3) (2021).
- Voos, K, Schönauer E, Alhayek A, Haupenthal J, Andreas A, Muller R, Hartmann RW, Brandstetter H, Hirsch AKH, Ducho C. Phosphonate as a Stable Zinc-Binding Group for "Pathoblocker" Inhibitors of Clostridial Collagenase H (ColH). *ChemMedChem* (2021).
- Weber M, Basu S, Gonzalez B, Greslehner GP, Singer S, Haskova D, Hasek J, Breitenbach M, Gourlay W, Cullen PJ, Rinnerthaler M. Actin Cytoskeleton Regulation by the Yeast NADPH Oxidase Yno1p Impacts Processes Controlled by MAPK Pathways. *Antioxidants (Basel)* 10(2) (2021).

October – December 2020

- Ahumada V, Manotas M, Zakzuk J, Aglas L, Coronado S, Briza P, Lackner P, Regino R, Araujo G, Ferreira F, Caraballo L. Identification and Physicochemical Characterization of a New Allergen from *Ascaris lumbricoides*. *Int J Mol Sci* 21(24) (2020).
- Blöchl C, Regl C, Huber CG, Winter P, Weiss R, Wohlschlager T. Towards middle-up analysis of polyclonal antibodies: subclass-specific N-glycosylation profiling of murine immunoglobulin G (IgG) by means of HPLC-MS. *Sci Rep* 10(1): 18080 (2020).
- Braunschmid H, Dötterl S. Does the Rarity of a Flower's Scent Phenotype in a Deceptive Orchid Explain Its Pollination Success? *Front Plant Sci* 11: 584081 (2020).
- Di Carvalho JA, Wickham SA. Does spatiotemporal nutrient variation allow more species to coexist? *Oecologia* 194(4): 695-707 (2020).
- Di Muzio M, Wildner S, Huber S, Hauser M, Vejvar E, Auzinger W, Regl C, Laimer J, Zennaro D, Wopfner N, Huber CG, van Ree R, Mari A, Lackner P, Ferreira F, Schubert M, Gadermaier G.

- Hydrogen/deuterium exchange memory NMR reveals structural epitopes involved in IgE cross-reactivity of allergenic lipid transfer proteins. *J Biol Chem* (2020).
- Eberle J, Ahrens D, Mayer C, Niehuis O, Misof B. A Plea for Standardized Nuclear Markers in Metazoan DNA Taxonomy. *Trends Ecol Evol* 35(4): 336-345 (2020).
- Eckhard U, Blöchl C, Jenkins BGL, Mansfield MJ, HuberCG, DoxeyAC, Brandstetter H. Identification and characterization of the proteolytic flagellin from the common freshwater bacterium *Hylemonella gracilis*. *Sci Rep* 10(1): 19052 (2020).
- El-Sayed N, Korotchenko E, Scheiblhofer S, Weiss R, Schneider M. Functionalized multifunctional nanovaccine for targeting dendritic cells and modulation of immune response. *Int J Pharm* 593: 120123 (2021).
- Esser-Skala W, Segl M, Wohlschlager T, Reisinger V, Holzmann J, Huber CG. Exploring sample preparation and data evaluation strategies for enhanced identification of host cell proteins in drug products of therapeutic antibodies and Fc-fusion proteins. *Anal Bioanal Chem* 412(24): 6583-6593 (2020).
- Farre-Armengol G, Fernandez-Martinez M, Filella I, Junker RR, Penuelas J. Deciphering the Biotic and Climatic Factors That Influence Floral Scents: A Systematic Review of Floral Volatile Emissions. *Front Plant Sci* 11: 1154 (2020).
- Ghosh N, Sircar G, Asam C, Wolf M, Hauser M, Saha S, Ferreira F, Bhattacharya SG. Purification and biochemical characterization of Hel a 6, a cross-reactive pectate lyase allergen from Sunflower (*Helianthus annuus* L.) pollen. *Sci Rep* 10(1): 20177 (2020).
- Hollbacher B, Duhon T, Motley S, Klicznik MM, Gratz IK, Campbell DJ. Transcriptomic Profiling of Human Effector and Regulatory T Cell Subsets Identifies Predictive Population Signatures. *Immunohorizons* 4(10): 585-596 (2020).
- Huber S, van der Kleij H, Wildner S, Wolf M, Wallner M, Hofer H, Asam C, Briza P, Ferreira F, Hauser M. Chemical modification of ragweed extract results in an increased safety profile while maintaining immunogenicity. *Allergy* (2020).
- Klaps J, de Vega C, Herrera C M, Junker RR, Lievens B, Alvarez-Perez S. *Candida metrosideri* pro tempore sp. nov. and *Candida ohialehuae* pro tempore sp. nov., two antifungal-resistant yeasts associated with *Metrosideros polymorpha* flowers in Hawaii. *PLoS One* 15(10): e0240093 (2020).
- Kohlberger M, Wildner S, Regl C, Huber CG, Gadermaier G. Rituximab-specific DNA aptamers are able to selectively recognize heat-treated antibodies. *PLoS One* 15(11): e0241560 (2020).
- Laimer J, Lackner P. MHCII3D-Robust Structure Based Prediction of MHC II Binding Peptides. *Int J Mol Sci* 22(1) (2020).
- Li J, Rinnerthaler M, Hartl J, Weber M, Karl T, Breitenbach-Koller H, Mulleder M, Vowinckel J, Marx H, Sauer M, Mattanovich D, Ata O, De S, Greslehner GP, Geltinger F, Burhans B, Grant C, Doronina V, Ralser M, Streubel MK, Grabner C, Jarolim S, Mosshammer C, Gourlay CW, Hasek J, Cullen PJ, Liti G, Ralser M, Breitenbach M. Slow Growth and Increased Spontaneous Mutation Frequency in Respiratory Deficient *afp1* (-) Yeast Suppressed by a Dominant Mutation in *ATP3*. *G3 (Bethesda)* 10(12): 4637-4648 (2020).
- Milet-Pinheiro P, Domingos-Melo A, Olivera JB, Albuquerque NSL, Costa, ACG, Albuquerque-Lima S, Silva MFR, Navarro Dma, Maia ACD, Gundersen LL, Schubert M, Dotterl S, Machado IC. A

- Semivolatile Floral Scent Marks the Shift to a Novel Pollination System in Bromeliads. *Curr Biol* (2020).
- Papadiamantis AG, Klaessig FC, Exner, TE, Hofer S, Hofstaetter N, Himly M, Williams MA, Doganis P, Hoover MD, Afantitis A, Melagraki G, Nolan TS, Rumble J, Maier D, Lynch I. Metadata Stewardship in Nanosafety Research: Community-Driven Organisation of Metadata Schemas to Support FAIR Nanoscience Data. *Nanomaterials* (Basel) 10(10) (2020).
- Paul K, Bottinger, K, Mitic BM, Scherfler G, Posch C, Behrens D, Huber CG, Herwig C. Development, characterization, and application of a 2-Compartment system to investigate the impact of pH inhomogeneities in large-scale CHO-based processes. *Eng Life Sci* 20(8): 368-378 (2020).
- Pinheiro DF, Szenes-Nagy AB, Maurano MM, Lietzenmayer M, Klicznik MM, Holly R, Kirchmeier D, Kitzmueller S, Achatz-Straussberger G, Rosenblum MD, Thalhamer J, Abbas AK, Gratz IK. Cutting Edge: Tissue Antigen Expression Levels Fine-Tune T Cell Differentiation Decisions In Vivo. *J Immunol* 205(10): 2577-2582 (2020).
- Plamberger CP, Van Wijk HE, Kerschbaum H, Pletzer BA, Gruber G, Oberascher K, Dresler M, Hahn MA, Hoedlmoser K. Impact of menstrual cycle phase and oral contraceptives on sleep and overnight memory consolidation. *J Sleep Res*: e13239 (2020).
- Pointner L, Bethanis A, Thaler M, Traidl-Hoffmann C, Gilles S, Ferreira F, Aglas L. Initiating pollen sensitization - complex source, complex mechanisms. *Clin Transl Allergy* 10: 36 (2020).
- Prutsch N, Gurnhofer E, Suske T, Liang H C, Schleder M, Roos S, Wu L C, Simonitsch-Klupp I, Alvarez-Hernandez A, Kornauth C, Leone D A, Svinka J, Eferl R, Limberger T, Aufinger A, Shirsath N, Wolf P, Hielscher T, Aberger F, Schmoellerl J, Stoiber D, Strobl B, Jager U, Staber P B, Grebien F, Moriggl R, Muller M, Inghirami G G, Sanda T, Look A T, Turner S D, Kenner L, Merkel O. Correction: Dependency on the TYK2/STAT1/MCL1 axis in anaplastic large cell lymphoma. *Leukemia* 34(11): 3105 (2020).
- Rasputnig G, Anderl F, Kunert O, Schaidler M, Bruckner A, Schubert M, Dotterl S, Fuchs R, Leis HJ. A Novel Class of Defensive Compounds in Harvestmen: Hydroxy-gamma-Lactones from the Phalangiid *Egaenus convexus*. *J Nat Prod* 83(11): 3278-3286 (2020).
- Rauer D, Gilles S, Wimmer M, Frank U, Mueller C, Musiol S, Vafadari B, Aglas L, Ferreira F, Schmitt-Kopplin P, Durner J, Winkler JB, Ernst D, Behrendt H, Schmidt-Weber CB, Traidl-Hoffmann, C, Alessandrini F. Ragweed plants grown under elevated CO₂ levels produce pollen which elicit stronger allergic lung inflammation. *Allergy* (2020).
- Rieksta J, Li T, Junker RR, Jepsen JU, Ryde I, Rinnan R. Insect Herbivory Strongly Modifies Mountain Birch Volatile Emissions. *Front Plant Sci* 11: 558979 (2020).
- Sarajlic M, Neuper T, Vetter J, Schaller S, Klicznik MM, Gratz IK, Wessler S, Posselt G, Horejs-Hoeck J. *H. pylori* modulates DC functions via T4SS/TNF α /p38-dependent SOCS3 expression. *Cell Commun Signal* 18(1): 160 (2020).
- Scheiner R, Strauss S, Thamm M, Farre-Armengol G, Junker RR. The Bacterium *Pantoea ananatis* Modifies Behavioral Responses to Sugar Solutions in Honeybees. *Insects* 11(10) (2020).
- Swartzwelter BJ, Fux AC, Johnson L, Swart E, Hofer S, Hofstatter N, Geppert M, Italian P, Boraschi D, Duschl A, Himly M. The Impact of Nanoparticles on Innate Immune Activation by Live Bacteria. *Int J Mol Sci* 21(24) (2020).
- Swoboda A, Soukup R, Eckel O, Kinslechner K, Wingelhofer B, Schorghofer D, Sternberg C, Pham HTT, Vallianou M, Horvath J, Stoiber D, Kenner L, Larue L, Poli V, Beermann F, Yokota T, Kubicek S,

Krausgruber T, Rendeiro AF, Bock C, Zenz R, Kovacic B, Aberger F, Hengstschlager M, Petzelbauer P, Mikula M, Moriggl R. STAT3 promotes melanoma metastasis by CEBP-induced repression of the MITF pathway. *Oncogene* (2020).

Zhao L, Fu W, Gao B, Liu Y, Wu S, Chen Z, Zhang X, Wang H, Feng Y, Wang X, Wang H, Lan T, Liu M, Wang X, Sun Y, Luo F, Gadermaier G, Ferreira F, Versteeg SA, Akkerdaas JH, Wang D, Valenta R, Vrtala S, Gao Z, van Ree R. Variation in IgE binding potencies of seven *Artemisia* species depending on content of major allergens. *Clin Transl Allergy* 10(1): 50 (2020).

Zissler A, Stoiber W, Steinbacher P, Geissenberger J, Monticelli FC, Pittner S. Postmortem Protein Degradation as a Tool to Estimate the PMI: A Systematic Review. *Diagnostics (Basel)* 10(12) (2020).

July – September 2020

Benedetti B, Dannehl D, König R, Coviello S, Kreutzer C, Zaunmair P, Jakubecova D, Weiger T M, Aigner L, Nacher J, Engelhardt M, Couillard-Despres S. Functional Integration of Neuronal Precursors in the Adult Murine Piriform Cortex. *Cereb Cortex* 30(3): 1499-1515 (2020).

Bernegger S, Brunner C, Vizovisek M, Fonovic M, Cuciniello G, Giordano F, Stanojlovic V, Jarzab M, Simister P, Feller S M, Obermeyer G, Posselt G, Turk B, Cabrele C, Schneider G, Wessler S. A novel FRET peptide assay reveals efficient *Helicobacter pylori* HtrA inhibition through zinc and copper binding. *Sci Rep* 10(1): 10563 (2020).

Buchner O, Steiner P, Andosch A, Holzinger A, Stegner M, Neuner G, Lutz-Meindl U. A new technical approach for preparing frozen biological samples for electron microscopy. *Plant Methods* 16: 48 (2020).

Chichirau B E, Scheidt T, Diechler S, Neuper T, Horejs-Hoeck J, Huber C G, Posselt G, Wessler S. Dissecting the *Helicobacter pylori*-regulated transcriptome of B cells. *Pathog Dis* (2020).

Dall E, Zauner F B, Soh W T, Demir F, Dahms S O, Cabrele C, Huesgen P F, Brandstetter H. Structural and functional studies of *Arabidopsis thaliana* legumain beta reveal isoform specific mechanisms of activation and substrate recognition. *J Biol Chem* 295(37): 13047-13064 (2020).

Farre-Armengol G, Fernandez-Martinez M, Filella I, Junker R R, Penuelas J. Deciphering the Biotic and Climatic Factors That Influence Floral Scents: A Systematic Review of Floral Volatile Emissions. *Front Plant Sci* 11: 1154 (2020).

Fiebig T, Cramer J T, Bethe A, Baruch P, Curth U, Fuhring J I, Buettner F F R, Vogel U, Schubert M, Fedorov R, Muhlenhoff M. Structural and mechanistic basis of capsule O-acetylation in *Neisseria meningitidis* serogroup A. *Nat Commun* 11(1): 4723 (2020).

Foissner I, Hoefftberger M, Hoepflinger M C, Sommer A, Bulychev A A, Brefeldin A inhibits clathrin-dependent endocytosis and ion transport in *Chara* internodal cells. *Biol Cell* (2020).

Gimenes S N C, Aglas L, Wildner S, Huber S, Silveira A C P, Lopes D S, Rodrigues R S, Goulart L R, Briza P, Ferreira F, de Melo Rodrigues Avila V, Gadermaier G. Biochemical and functional characterization of a new recombinant phospholipase A2 inhibitor from *Crotalus durissus collilineatus* snake serum. *Int J Biol Macromol* (2020).

Grund-Groschke S, Ortner D, Szenes-Nagy A B, Zaborsky N, Weiss R, Neureiter D, Wipplinger M, Risch A, Hammerl P, Greil R, Sibilia M, Gratz I K, Stoitzner P, Aberger F. Epidermal activation of Hedgehog signaling establishes an immunosuppressive microenvironment in basal cell carcinoma by modulating skin immunity. *Mol Oncol* 14(9): 1930-1946 (2020).

- Gutjahr J C, Bayer E, Yu X, Laufer J M, Hopner J P, Tesanovic S, Harzschel A, Auer G, Riess T, Salmhofer A, Szenes E, Haslauer T, Durand-Onayli V, Ramspacher A, Pennisi S P, Artinger M, Zaborsky N, Chigaev A, Aberger F, Neureiter D, Pleyer L, Legler, D F, Orian-Rousseau V, Greil R, Hartmann T N. CD44 engagement enhances acute myeloid leukemia cell adhesion to the bone marrow microenvironment by increasing VLA-4 avidity. *Haematologica* (2020).
- Hinterholzer A, Stanojlovic V, Regl C, Huber C G, Cabrele C, Schubert M. Identification and Quantification of Oxidation Products in Full-Length Biotherapeutic Antibodies by NMR Spectroscopy. *Anal Chem* 92(14): 9666-9673 (2020).
- Jarzab M, Posselt G, Meisner-Kober N, Wessler S. Helicobacter pylori-Derived Outer Membrane Vesicles (OMVs): Role in Bacterial Pathogenesis? *Microorganisms* 8(9) (2020).
- Joubert A I, Geppert M, Johnson L, Mills-Goodlet R, Michelini S, Korotchenko E, Duschl A, Weiss R, Horejs-Hock J, Himly M. Mechanisms of Particles in Sensitization, Effector Function and Therapy of Allergic Disease. *Front Immunol* 11: 1334 (2020).
- Klicznik M M, Benedetti A, Gail L M, Varkhande S R, Holly R, Laimer M, Stoecklinger A, Sir A, Reitsamer R, Neuper T, Horejs-Hoeck J, Rosenblum M D, Campbell D J, Murauer E M, Gratz I K. A novel humanized mouse model to study the function of human cutaneous memory T cells in vivo in human skin. *Sci Rep* 10(1): 11164 (2020).
- Konstantinovic J, Yahiaoui S, Alhayek A, Haupenthal J, Schonauer E, Andreas A, Kany A M, Muller R, Koehnke J, Berger, F K, Bischoff M, Hartmann R W, Brandstetter, H, Hirsch A K H. N-Aryl-3-mercaptopuccinimides as Antivirulence Agents Targeting Pseudomonas aeruginosa Elastase and Clostridium Collagenases. *J Med Chem* 63(15): 8359-8368 (2020).
- Korotchenko E, Schiessl V, Scheiblhofer S, Schubert M, Dall E, Joubert I A, Strandt H, Neuper T, Sarajlic M, Bauer R, Geppert M, Joedicke D, Wildner S, Schaller S, Winkler S, Gadermaier G, Horejs-Hoeck J, Weiss R. Laser-facilitated epicutaneous immunotherapy with hypoallergenic beta-glucan neoglycoconjugates suppresses lung inflammation and avoids local side effects in a mouse model of allergic asthma. *Allergy* (2020).
- Lametschwandtner A, Minnich B. Microvascular anatomy of ovary and oviduct in the adult African Clawed Toad (*Xenopus laevis* DAUDIN, 1802)-Histomorphology and scanning electron microscopy of vascular corrosion casts. *Anat Histol Embryol* (2020).
- Muller A T, Posselt G, Gabernet G, Neuhaus C, Bachler S, Blatter M, Pfeiffer B, Hiss J A, Dittrich P S, Altmann K H, Wessler S, Schneider G. Morphing of Amphipathic Helices to Explore the Activity and Selectivity of Membranolytic Antimicrobial Peptides. *Biochemistry* (2020).
- Nardi F D, Hulber K, Moser D, Alonso-Marcos H, Tribsch A, Dobes C. Occurrence of apomictic conspecifics and ecological preferences rather than colonization history govern the geographic distribution of sexual *Potentilla puberula*. *Ecol Evol* 10(14): 7306-7319 (2020).
- Neuper T, Neureiter D, Sarajlic M, Strandt H, Bauer R, Schwarz H, Suchanek P, Korotchenko E, Dillon S R, Hammerl P, Stoecklinger A, Weiss R, Horejs-Hoeck J. IL-31 transgenic mice show reduced allergen-induced lung inflammation. *Eur J Immunol* (2020).
- Pittner S, Gotsmy W, Zissler A, Ehrenfellner B, Baumgartner D, Schrufer A, Steinbacher P, Monticelli F. Correction to: Intra- and intermuscular variations of postmortem protein degradation for PMI estimation. *Int J Legal Med* 134(5): 1783 (2020).
- Pittner S, Gotsmy W, Zissler A, Ehrenfellner B, Baumgartner D, Schrufer A, Steinbacher P, Monticelli F. Intra- and intermuscular variations of postmortem protein degradation for PMI estimation. *Int J Legal Med* 134(5): 1775-1782 (2020).

Singh R R, Verstraeten B, Siddique S, Tegene A M, Tenhaken R, Frei M, Haeck A, Demeestere K, Pokhare S, Gheysen G, Kyndt T. Ascorbate oxidation activates systemic defence against root-knot nematode *Meloidogyne graminicola* in rice. *J Exp Bot* 71(14): 4271-4284 (2020).

Steiner P, Obwegeser S, Wanner G, Buchner O, Lutz-Meindl U, Holzinger A. Cell Wall Reinforcements Accompany Chilling and Freezing Stress in the Streptophyte Green Alga *Klebsormidium crenulatum*. *Front Plant Sci* 11: 873 (2020).

Unger M S, Li E, Scharnagl L, Poupardin R, Altendorfer B, Mrowetz H, Hutter-Paier B, Weiger T M, Heneka M T, Attems J, Aigner L. CD8(+) T-cells infiltrate Alzheimer's disease brains and regulate neuronal- and synapse-related gene expression in APP-PS1 transgenic mice. *Brain Behav Immun* (2020).

April – June 2020

Aglas L, Soh WT, Kraiem A, Wenger M, Brandstetter H, Ferreira F. Ligand Binding of PR-10 Proteins with a Particular Focus on the Bet v 1 Allergen Family. *Curr Allergy Asthma Rep* 20(7): 25 (2020).

Araujo GR, Aglas L, Vaz ER, Machado Y, Huber S, Himly M, Duschl A, Goulart LR, Ferreira F. TGFβ1 mimetic peptide modulates immune response to grass pollen allergens in mice. *Allergy* 75(4): 882-891 (2020).

Boraschi D, Alijagic A, Auguste M, Barbero F, Ferrari E, Hernadi S, Mayall C, Michelini S, Navarro Pacheco NI, Prinelli A, Swart E, Swartzwelter BJ, Bastus NG, Canesi L, Drobne D, Duschl A, Ewart MA, Horejs-Hoeck J, Italiani P, Kemmerling B, Kille P, Prochazkova P, Puentes VF, Spurgeon DJ, Svendsen C, Wilde CJ, Pinsino A. Addressing Nanomaterial Immunotoxicity by Evaluating Innate Immunity across Living Species. *Small* 16(21): e2000598 (2020).

Bulychev AA, Foissner I. Inhibition of endosomal trafficking by brefeldin A interferes with long-distance interaction between chloroplasts and plasma membrane transporters. *Physiol Plant* 169(1): 122-134 (2020).

da Silva ES, Aglas L, Pinheiro CS, de Andrade Belitardo EMM, Silveira EF, Huber S, Torres RT, Wallner M, Briza P, Lackner P, Laimer J, Pacheco LGC, Cruz AA, Alcantara-Neves NM, Ferreira F. A hybrid of two major *Blomia tropicalis* allergens as an allergy vaccine candidate. *Clin Exp Allergy* 50(7): 835-847 (2020).

De Chiara M, Friedrich A, Barre B, Breitenbach M, Schacherer J, Liti G. Discordant evolution of mitochondrial and nuclear yeast genomes at population level. *BMC Biol* 18(1): 49 (2020).

Esser-Skala W, Wohlschlager T, Regl C, Huber CG. A Simple Strategy to Eliminate Hexosylation Bias in the Relative Quantification of N-glycosylation in Biopharmaceuticals. *Angew Chem Int Ed Engl* (2020).

Geltinger F, Tevini J, Briza P, Geiser A, Bischof J, Richter K, Felder T, Rinnerthaler M. The transfer of specific mitochondrial lipids and proteins to lipid droplets contributes to proteostasis upon stress and aging in the eukaryotic model system *Saccharomyces cerevisiae*. *Geroscience* 42(1): 19-38 (2020).

Gokkaya M, Damialis A, Nussbaumer T, Beck I, Bounas-Pyrras N, Bezold S, Amisi MM, Kolek F, Todorova A, Chaker A, Aglas L, Ferreira F, Redegeld FA, Brunner JO, Neumann AU, Traidl-Hoffmann C, Gilles S. Defining biomarkers to predict symptoms in subjects with and without allergy under natural pollen exposure. *J Allergy Clin Immunol* (2020).

- Gruber MS, Weissenbacher B, Agatha S. Ultrastructural Studies on a Model Tintinnid - Schmidingerella meunieriz(Kofoed & Campbell, 1929) Agatha & Struder-Kypke, 2012 (Ciliophora). II. The Oral Apparatus. J Eukaryot Microbiol 67(4): 463-479 (2020).
- Heimesaat MM, Schmidt AM, Mousavi S, Escher U, Tegtmeier N, Wessler S, Gadermaier G, Briza P, Hofreuter D, Bereswil S, Backert S. Peptidase PepP is a novel virulence factor of Campylobacter jejuni contributing to murine campylobacteriosis. Gut Microbes: 1-15 (2020).
- Himly M, Geppert M, Hofer S, Hofstätter N, Horejs-Hock J, Duschl A. When Would Immunologists Consider a Nanomaterial to be Safe? Recommendations for Planning Studies on Nanosafety. Small 16(21): e1907483 (2020).
- Hutter T, Ganser MH, Kocher M, Halkic M, Agatha S, Augsten N. DeSignate: detecting signature characters in gene sequence alignments for taxon diagnoses. BMC Bioinformatics 21(1): 151 (2020).
- Johnson L, Duschl A, Himly M. Nanotechnology-Based Vaccines for Allergen-Specific Immunotherapy: Potentials and Challenges of Conventional and Novel Adjuvants under Research. Vaccines (Basel) 8(2) (2020).
- Joubert IA, Kovacs D, Scheiblhofer S, Winter P, Korotchenko E, Strandt H, Weiss R. Mast cells and gammadelta T cells are largely dispensable for adaptive immune responses after laser-mediated epicutaneous immunization. Vaccine 38(5): 1015-1024 (2020).
- Kamath SD, Scheiblhofer S, Johnson CM, Machado Y, McLean T, Taki AC, Ramsland PA, Iyer S, Joubert I, Hofer H, Wallner M, Thalhamer J, Rolland J, O'Hehir R, Briza P, Ferreira F, Weiss R, Lopata AL. Effect of structural stability on endolysosomal degradation and T-cell reactivity of major shrimp allergen tropomyosin. Allergy (2020).
- Korotchenko E, Moya R, Scheiblhofer S, Joubert IA, Horejs-Hoeck J, Hauser M, Calzada D, Iraola V, Carnes J, Weiss R. Laser-facilitated epicutaneous immunotherapy with depigmented house dust mite extract alleviates allergic responses in a mouse model of allergic lung inflammation. Allergy 75(5): 1217-1228 (2020).
- Locker F, Leitner J, Aminzadeh-Gohari S, Weber DD, Sanio P, Koller A, Feichtinger RG, Weiss R, Kofler B, Lang R. The Influence of Ketogenic Diets on Psoriasiform-Like Skin Inflammation. J Invest Dermatol 140(3): 707-710 e707 (2020).
- Neuper T, Frauenlob T, Sarajlic M, Posselt G, Wessler S, Horejs-Hoeck J. TLR2, TLR4 and TLR10 Shape the Cytokine and Chemokine Release of H. pylori-Infected Human DCs. Int J Mol Sci 21(11) (2020).
- Nguyen-Kim H, San Clemente H, Laimer J, Lackner P, Gadermaier G, Dunand C, Jamet E. The Cell Wall PAC (Proline-Rich, Arabinogalactan Proteins, Conserved Cysteines) Domain-Proteins Are Conserved in the Green Lineage. Int J Mol Sci 21(7) (2020).
- Oberhuber M, Pecoraro M, Rusz M, Oberhuber G, Wieselberg M, Haslinger P, Gurnhofer E, Schleder M, Limberger T, Lagger S, Pencik J, Kodajova P, Hogler S, Stockmaier G, Grund-Groschke S, Aberger F, Bolis M, Theurillat JP, Wiebringhaus R, Weiss T, Haitel A, Brehme M, Wadsak W, Griss J, Mohr T, Hofer A, Jager A, Pollheimer J, Egger G, Koellensperger G, Mann M, Hantusch B, Kenner, L. STAT3-dependent analysis reveals PDK4 as independent predictor of recurrence in prostate cancer. Mol Syst Biol 16(4): e9247 (2020).
- Pertl-Obermeyer H, Obermeyer G. In Vivo Cross-Linking to Analyze Transient Protein-Protein Interactions. Methods Mol Biol 2139: 273-287 (2020).

- Pittner S, Bugelli V, Weitgasser K, Zissler A, Sanit S, Lutz L, Monticelli F, Campobasso CP, Steinbacher P, Amendt J. A field study to evaluate PMI estimation methods for advanced decomposition stages. *Int J Legal Med* 134(4): 1361-1373 (2020).
- Reinders J, Altenbuchinger M, Limm K, Schwarzfischer P, Scheidt T, Strasser L, Richter J, Szczepanowski M, Huber CG, Klapper W, Spang R, Oefner PJ. Platform independent protein-based cell-of-origin subtyping of diffuse large B-cell lymphoma in formalin-fixed paraffin-embedded tissue. *Sci Rep* 10(1): 7876 (2020).
- Samonig L, Loipetzberger A, Blochl C, Rurik M, Kohlbacher O, Aberger F, Huber CG. Proteins and Molecular Pathways Relevant for the Malignant Properties of Tumor-Initiating Pancreatic Cancer Cells. *Cells* 9(6) (2020).
- Scheidt T, Alka O, Gonczarowska-Jorge H, Gruber W, Rathje F, Dell'Aica M, Rurik M, Kohlbacher O, Zahedi RP, Aberger F, Huber CG. Phosphoproteomics of short-term hedgehog signaling in human medulloblastoma cells. *Cell Commun Signal* 18(1): 99 (2020).
- Schmailzl J, Vorage MW, Stutz H. Intact and middle-down CIEF of commercial therapeutic monoclonal antibody products under non-denaturing conditions. *Electrophoresis* 41(12): 1109-1117 (2020).
- Strandt H, Voluzan O, Niedermair T, Ritter U, Thalhamer J, Malissen B, Stoecklinger A, Henri S. Macrophages and Fibroblasts Differentially Contribute to Tattoo Stability. *Dermatology*: 1-7 (2020).
- Wiederstein M, Sippl MJ. TopMatch-web: pairwise matching of large assemblies of protein and nucleic acid chains in 3D. *Nucleic Acids Res* 48(W1): W31-W35 (2020).

January – March 2020

- Aalberse RC, Mueller GA, Derksen NIL, Aalberse JA, Edwards LL, Pomes A, Lidholm J, Rispens T, Briza P. Identification of the amino-terminal fragment of Ara h 1 as a major target of the IgE-binding activity in the basic peanut protein fraction. *Clin Exp Allergy* 50(3): 401-405 (2020).
- Althammer M, Blöchl C, Reischl R, Huber CG, Tenhaken R. Phosphoglucosyltransferase Is Not the Target for Galactose Toxicity in Plants. *Front Plant Sci* 11: 167 (2020).
- Barth JMI, Gubili C, Matschiner M, Torresen OK, Watanabe S, Egger B, Han YS, Feunteun E, Sommaruga R, Jehle R, Schabetsberger R. Stable species boundaries despite ten million years of hybridization in tropical eels." *Nat Commun* 11(1): 1433 (2020).
- Budde I, Litschko C, Fuhring JJ, Gerardy-Schahn R, Schubert M, Fiebig T. An enzyme-based protocol for cell-free synthesis of nature-identical capsular oligosaccharides from *Actinobacillus pleuropneumoniae* serotype 1. *J Biol Chem* (2020).
- Buzhdygan OY, Meyer ST, Weisser WW, Eisenhauer N, Ebeling A, Borrett S R, Buchmann N, Cortois R, De Deyn GB, de Kroon H, Gleixner G, Hertzog LR, Hines J, Lange M, Mommer L, Ravenek J, Scherber C, Scherer-Lorenzen M, Scheu S, Schmid B, Steinauer K, Strecker T, Tietjen B, Vogel A, Weigelt A, Petermann JS. Biodiversity increases multitrophic energy use efficiency, flow and storage in grasslands. *Nat Ecol Evol* 4(3): 393-405 (2020).
- da Silva ES, Huber S, Alcantara-Neves NM, Asam C, Silveira EF, de Andrade Belitardo EMM, Aglas L, Wallner M, Gadermaier G, Briza P, Karner I, Torres RT, Alvarez JR, Wuenschmann S, Chapman M, Ferreira F, Pinheiro CS. N-terminal peptide deletion influences immunological and structural features of Blo t 5. *Allergy* (2020).

- Egger F, Jakab M, Fuchs J, Oberascher K, Brachtl G, Ritter M, Kerschbaum HH, Gaisberger M. Effect of Glycine on BV-2 Microglial Cells Treated with Interferon-gamma and Lipopolysaccharide." *Int J Mol Sci* 21(3) (2020).
- Geppert M, Schwarz A, Stangassinger LM, Wenger S, Wienerroither LM, Ess S, Duschl A, Himly M. Interactions of TiO₂ Nanoparticles with Ingredients from Modern Lifestyle Products and Their Effects on Human Skin Cells. *Chem Res Toxicol* (2020).
- Gratz IK, Campbell DJ. Resident memory T cells show that it is never too late to change your ways." *Nat Immunol* 21(4): 359-360 (2020).
- Hufnagl K, Moussa Afify S, Braun N, Wagner S, Wallner M, Hauser M, Wiederstein M, Gadermaier G, Wildner S, Redegeld FA, Blokhuis BR, Hofstetter G, Pali-Scholl I, Roth-Walter F, Pacios LF, Jensen-Jarolim E. Retinoic acid-loading of the major birch pollen allergen Bet v 1 may improve specific allergen immunotherapy: in silico, in vitro and in vivo data in BALB/c mice. *Allergy* (2020).
- Jaksch-Bogensperger H, Spiegl-Kreinecker S, Arosio P, Eckl P, Golaszewski S, Ebner Y, Al-Schameri R, Strasser P, Weis S, Bresgen N. Ferritin in glioblastoma. *Br J Cancer* (2020).
- Karamanoli K, Kokalas V, Koveos DS, Junker RR Farre-Armengol G. Bacteria Affect Plant-Mite Interactions Via Altered Scent Emissions. *J Chem Ecol* (2020).
- Mrzilkova J, Michenka P, Seremeta M, Kremen J, Dudak J, Zemlicka J, Musil V, Minnich B, Zach P. Morphology of the Vasculature and Blood Supply of the Brown Adipose Tissue Examined in an Animal Model by Micro-CT. *Biomed Res Int* 2020: 7502578 (2020).
- Ohler LM, Lechleitner M, Junker RR. Microclimatic effects on alpine plant communities and flower-visitor interactions. *Sci Rep* 10(1): 1366 (2020).
- Petermann JS, Roberts AL, Hemmerling C, Bajerski F, Pascual J, Overmann J, Weisser WW, Ruess L, Gossner MM. Direct and indirect effects of forest management on tree-hole inhabiting aquatic organisms and their functional traits. *Sci Total Environ* 704: 135418 (2020).
- Petkovic I, Bresgen N, Gilardoni E, Regazzoni L, Uchida K, Aldini G, Siems W, Eckl P. In Vitro Aging of Human Skin Fibroblasts: Age-Dependent Changes in 4-Hydroxynonenal Metabolism. *Antioxidants (Basel)* 9(2) (2020).
- Samadi N, Klems M, Heiden D, Bauer R, Kitzmuller C, Weidmann E, Ret D, Ondracek AS, Duschl A, Horejs-Hoeck J, Untersmayr E. Nitrated food proteins induce a regulatory immune response associated with allergy prevention after oral exposure in a Balb/c mouse food allergy model. *Allergy* 75(2): 412-422 (2020).
- Soh WT, Demir F, Dall E, Perrar A, Dahms SO, Kuppusamy M, Brandstetter H, Huesgen PF. ExtENDING Proteome Coverage with Legumain as a Highly Specific Digestion Protease. *Anal Chem* 92(4): 2961-2971 (2020).
- Xu H, Zhou G, Dotterl S, Schaffler I, Degen T, Chen L, Turlings TCJ. Distinct Roles of Cuticular Aldehydes as Pheromonal Cues in Two Cotesia Parasitoids. *J Chem Ecol* 46(2): 128-137 (2020).

October – December 2019

- Abfalter C M, Bernegger S, Jarzab M, Posselt G, Ponnuraj K, Wessler S. The proteolytic activity of *Listeria monocytogenes* HtrA. *BMC Microbiol* 19(1): 255 (2019).

- Araujo G R, Aglas L, Vaz E R, Machado Y, Huber S, Himly M, Duschl A, Goulart L R, Ferreira F. TGFbeta1 mimetic peptide modulates immune response to grass pollen allergens in mice. *Allergy*. (2019).
- Benedetti B, Dannehl D, Konig R, Coviello S, Kreutzer C, Zaunmair P, Jakubecova D, Weiger T M, Aigner L, Nacher J, Engelhardt M, Couillard-Despres S. Functional Integration of Neuronal Precursors in the Adult Murine Piriform Cortex. *Cereb Cortex* (2019).
- Bronger H, Magdolen V, Goettig P, Dreyer T. Proteolytic chemokine cleavage as a regulator of lymphocytic infiltration in solid tumors. *Cancer Metastasis Rev* 38(3): 417-430 (2019).
- Bulychev A A, Foissner I. Inhibition of endosomal trafficking by brefeldin A interferes with long-distance interaction between chloroplasts and plasma membrane transporters. *Physiol Plant* (2019).
- Chan S K, Pomes A, Hilger C, Davies J M, Mueller G, Kuehn, A, Lopata A L, Gadermaier G, van Hage M, Raulf M, Goodman R E. Keeping Allergen Names Clear and Defined. *Front Immunol* 10: 2600 (2019).
- Chichirau B E, Diechler S, Posselt G, Wessler S. Tyrosine Kinases in Helicobacter pylori Infections and Gastric Cancer. *Toxins (Basel)* 11(10) (2019).
- Geltinger F, Tevini J, Briza P, Geiser A, Bischof J, Richter K, Felder T, Rinnerthaler M. The transfer of specific mitochondrial lipids and proteins to lipid droplets contributes to proteostasis upon stress and aging in the eukaryotic model system *Saccharomyces cerevisiae*. *Geroscience* (2019).
- Grassi L and Cabrele C. Susceptibility of protein therapeutics to spontaneous chemical modifications by oxidation, cyclization, and elimination reactions. *Amino Acids* 51(10-12): 1409-1431 (2019).
- Heger T, Bernard-Verdier M, Gessler A, Greenwood A D, Grossart H P, Hilker M, Keinath S, Kowarik I, Kueffer C, Marquard E, Muller J, Niemeier S, Onandia G, Petermann J S, Rillig M C, Rodel M O, Saul W C, Schittko C, Tockner K, Joshi J, Jeschke J M. Towards an Integrative, Eco-Evolutionary Understanding of Ecological Novelty: Studying and Communicating Interlinked Effects of Global Change. *Bioscience* 69(11): 888-899 (2019).
- Hinterholzer A, Stanojlovic V, Cabrele C, Schubert M. Unambiguous Identification of Pyroglutamate in Full-Length Biopharmaceutical Monoclonal Antibodies by NMR Spectroscopy. *Anal Chem* 91(22): 14299-14305 (2019).
- Joubert I A, Kovacs D, Scheiblhofer S, Winter P, Korotchenko E, Strandt H, Weiss R. Mast cells and gammadelta T cells are largely dispensable for adaptive immune responses after laser-mediated epicutaneous immunization. *Vaccine* (2019).
- Junker R R, Lechleitner M H, Kuppler J, Ohler L M. Interconnectedness of the Grinnellian and Eltonian Niche in Regional and Local Plant-Pollinator Communities. *Front Plant Sci* 10: 1371 (2019).
- Klicznik M M, Morawski P A, Hollbacher B, Varkhane S R, Motley S J, Kuri-Cervantes L, Goodwin E, Rosenblum M D, Long S A, Brachtl G, Duhon T, Betts M R, Campbell D J, Gratz I K. Human CD4(+)CD103(+) cutaneous resident memory T cells are found in the circulation of healthy individuals. *Sci Immunol* 4(37) (2019).
- Locker F, Leitner J, Aminzadeh-Gohari S, Weber D D, Sanio P, Koller A, Feichtinger R G, Weiss R, Kofler B, Lang R. The Influence of Ketogenic Diets on Psoriasisiform-Like Skin Inflammation. *J Invest Dermatol* (2019).

Ondracek A S, Heiden D, Oostingh G J, Fuerst E, Fazekas-Singer J, Bergmayr C, Rohrhofer J, Jensen-Jarolim E, Duschl A, Untersmayr E. Immune Effects of the Nitrated Food Allergen Beta-Lactoglobulin in an Experimental Food Allergy Model. *Nutrients* 11(10) (2019).

Rachtersberger M, Cordeiro G D, Schaffler I, Dotterl S. Honeybee Pollinators Use Visual and Floral Scent Cues to Find Apple (*Malus domestica*) Flowers. *J Agric Food Chem* 67(48): 13221-13227 (2019).

Sarajlic M, Neuper, T, Fohrenbach Quiroz K T, Michelini S, Vetter J, Schaller S, Horejs-Hoeck J. IL-1 β Induces SOCS2 Expression in Human Dendritic Cells. *Int J Mol Sci* 20(23) (2019).

Wildner S, Griessner I, Stemeseder T, Regl C, Soh W T, Stock L G, Volker T, Alessandri C, Mari A, Huber C G, Stutz H, Brandstetter H, Gadermaier G. Boiling down the cysteine-stabilized LTP fold - loss of structural and immunological integrity of allergenic Art v 3 and Pru p 3 as a consequence of irreversible lanthionine formation." *Mol Immunol* 116: 140-150 (2019).

July – September 2019

Eremin A, Bulychiev A A, Kluge C, Harbinson J, Foissner I. PH-dependent cell-cell interactions in the green alga *Chara*. *Protoplasma* (2019).

Gatterer H, Bernatzky G, Burtscher J, Rainer M, Kayser B, Burtscher M. Are Pre-ascent Low-Altitude Saliva Cortisol Levels Related to the Subsequent Acute Mountain Sickness Score? Observations from a Field Study. *High Alt Med Biol* (2019).

Goettig P, Brandstetter H, Magdolen V. Surface loops of trypsin-like serine proteases as determinants of function. *Biochimie* (2019).

Licha D, Vidali S, Aminzadeh-Gohari S, Alka O, Breitzkreuz L, Kohlbacher O, Reischl R J, Feichtinger R G, Kofler B, Huber C G. Untargeted Metabolomics Reveals Molecular Effects of Ketogenic Diet on Healthy and Tumor Xenograft Mouse Models. *Int J Mol Sci* 20(16) (2019).

Limberger R, Pitt A, Hahn M W, Wickham S A. Spatial insurance in multi-trophic metacommunities. *Ecol Lett* (2019).

Mayr B, Niebauer J, Breitenbach-Koller H. Circulating miRNAs as predictors for morbidity and mortality in coronary artery disease. *Mol Biol Rep* (2019).

Pablos I, Egger M, Vejvar E, Reichl V, Briza P, Zennaro D, Rafaiani C, Pickl W, Bohle B, Mari A, Ferreira F, Gadermaier G. Similar Allergenicity to Different *Artemisia* Species Is a Consequence of Highly Cross-Reactive Art v 1-Like Molecules. *Medicina (Kaunas)* 55(8) (2019).

Pereira G A N, da Silva E B, Braga S F P, Leite P G, Martins L C, Vieira R P, Soh W T, Villela F S, Costa F M R, Ray D, de Andrade S F, Brandstetter H, Oliveira R B, Caffrey C R, Machado F S, Ferreira R S. Discovery and characterization of trypanocidal cysteine protease inhibitors from the 'malaria box'. *Eur J Med Chem* 179: 765-778 (2019).

Rassi E, Dorffner G, Gruber W, Schabus M, Klimesch W. Coupling and Decoupling between Brain and Body Oscillations. *Neurosci Lett* 711: 134401 (2019).

Riediker M, Zink D, Kreyling W, Oberdorster G, Elder A, Graham U, Lynch I, Duschl A, Ichihara G, Ichihara S, Kobayashi T, Hisanaga N, Umezawa M, Cheng T J, Handy R, Gulumian M, Tinkle S, Cassee F. Correction to: Particle toxicology and health - where are we? *Part Fibre Toxicol* 16(1): 26 (2019).

Samadi N, Klems M, Heiden D, Bauer R, Kitzmuller C, Weidmann E, Ret D, Ondracek A S, Duschl A, Horejs-Hoeck J, Untersmayr E. Nitrated food proteins induce a regulatory immune response

associated with allergy prevention after oral exposure in a Balb/c mouse food allergy model. *Allergy* (2019).

Santos da Silva E, Marques Ponte J C, Barbosa da Silva M, Silva Pinheiro C, Carvalho Pacheco L G, Ferreira F, Briza P, Alcantara-Neves N M. Proteomic Analysis Reveals Allergen Variability among Breeds of the Dust Mite *Blomia tropicalis*. *nt Arch Allergy Immunol*: 1-14 (2019).

Singer J, Achatz-Straussberger G, Bentley-Lukschal A, Fazekas-Singer J, Achatz G, Karagiannis S N, Jensen-Jarolim E. AllergoOncology: High innate IgE levels are decisive for the survival of cancer-bearing mice. *World Allergy Organ J* 12(7): 100044 (2019).

Stigler R G, Becker K, Hasanov E, Hormann R, Gassner R, Lepperding G. Osteocyte numbers decrease only in postcranial but not in cranial bones in humans of advanced age. *Ann Anat* 226: 57-63 (2019).

April – June 2019

Alonso-Marcos H, Nardi F D, Scheffknecht S, Tribsch A, Hulber K, Dobes, C. Difference in reproductive mode rather than ploidy explains niche differentiation in sympatric sexual and apomictic populations of *Potentilla puberula*. *Ecol Evol* (2019). 9(6): 3588-3598.

Antonucci Di Carvalho J, Wickham S A. Simulating eutrophication in a metacommunity landscape: an aquatic model ecosystem. *Oecologia* (2019). 189(2): 461-474.

Asllani F H, Schurz M, Bresgen N, Eckl P M, Alija A J. Genotoxicity risk assessment in fish (*Rutilus rutilus*) from two contaminated rivers in the Kosovo. *Sci Total Environ* (2019). 676: 429-435.

Barbosa da Silva E, Dall E, Briza P, Brandstetter H, Ferreira R S. Cruzain structures: apocruzain and cruzain bound to S-methyl thiomethanesulfonate and implications for drug design. *Acta Crystallogr F Struct Biol Commun* (2019). 75(Pt 6): 419-427.

Bardele C F, Stockmann N, Agatha S. Some Ultrastructural Features of the Planktonic Freshwater Ciliate *Limnostrombidium viride* (Alveolata, Ciliophora, Oligotrichida) and Improved Diagnoses of Oligotrich Taxa. *Acta Protozool* (2019). 57(3): 169-193.

Boachon B, Lynch J H, Ray S, Yuan J, Caldo K M P, Junker R R, Kessler S A, Morgan J A, Dudareva N. Natural fumigation as a mechanism for volatile transport between flower organs. *Nat Chem Biol* (2019). 15(6): 583-588.

Brandt K, Dotterl S, Fuchs R, Navarro Dmdaf, Machado I C S, Dobler D, Reiser O, Ayasse M, Milet-Pinheiro P. Subtle Chemical Variations with Strong Ecological Significance: Stereoselective Responses of Male Orchid Bees to Stereoisomers of Carvone Epoxide. *J Chem Ecol* (2019). 45(5-6): 464-473.

Cordeiro, G D, Fernandes Dos Santos I G, Silva C I D, Schlindwein C, Alves-Dos-Santos I, Dotterl S. Nocturnal floral scent profiles of Myrtaceae fruit crops. *Phytochemistry* (2019). 162: 193-198.

Costa L E, Alves P T, Carneiro A P, Dias A C S, Fujimura P T, Araujo G R, Tavares G S V, Ramos F F, Duarte M C, Menezes-Souza D, Briza P, Briza F F, Coelho E A F, Goulart L R. Leishmania infantum beta-Tubulin Identified by Reverse Engineering Technology through Phage Display Applied as Theranostic Marker for Human Visceral Leishmaniasis. *Int J Mol Sci* (2019). 20(8).

Danella Figo D, De Amicis K, Neiva Santos de Aquino D, Pomiecinski F, Gadermaier G, Briza P, Eduardo Santos Galvao C, Bussador do Amaral J, de Oliveira Martins C, Fernandes Morato Castro F, Kalil J, Souza Santos K. Cashew Tree Pollen: An Unknown Source of IgE-Reactive Molecules. *Int J Mol Sci* (2019). 20(10).

- Eichhorn S, Horschlager A, Steiner M, Laimer J, Jensen B M, Versteeg S A, Pablos I, Briza P, Jongejan L, Rigby N, Asturias J A, Portoles A, Fernandez-Rivas M, Papadopoulos N G, Mari A, Poulsen L K, Lackner P, van Ree R, Ferreira F, Gadermaier G. Rational Design, Structure-Activity Relationship and Immunogenicity of Hypoallergenic Pru p 3 Variants. *Mol Nutr Food Res* (2019). e1900336.
- Fang H, Zogg T, Brandstetter H. Maturation of coagulation factor IX during Xase formation as deduced using factor VIII-derived peptides. *FEBS Open Bio* (2019).
- Feichtinger R G, Mucha B E, Hengel H, Orfi Z, Makowski C, Dort J, D'Anjou G, Nguyen T T M, Buchert R, Juenger H, Freisinger P, Baumeister S, Schoser B, Ahting U, Keimer R, Nguyen C E, Fabre P, Gauthier J, Miguet M, Lopes F, AlHakeem A, AlHashem A, Tabarki B, Kandaswamy K K, Bauer P, Steinbacher P, Prokisch H, Sturm M, Strom T M, Ellezam B, Mayr J A, Schols L, Michaud J L, Campeau P M, Haack T B, Dumont N A. Biallelic variants in the transcription factor PAX7 are a new genetic cause of myopathy. *Genet Med* (2019).
- Ferreira F, Hubinger G, Spangfort M D. Legends of Allergy and Immunology: From a curious mind to a world class scientist-A brief biography of Professor T.P. King. *Allergy* (2019).
- Foissner I, Hoefftberger M. Chemical Fixation, Immunofluorescence, and Immunogold Labeling of Electron Microscopical Sections. *Methods Mol Biol* (2019). 1992: 43-62.
- Gao Z S, Fu W Y, Zhao L, Gao L, Zhou J Y, Gao B Y, Wu S, Versteeg S A, Ferreira F, Gadermaier G, van Ree R.. Localization of Four Allergens in Artemisia Pollen by Immunofluorescent Antibodies. *Int Arch Allergy Immunol* (2019). 179(3): 165-172.
- Glueck M, Hamminger C, Fefer M, Liu J, Plaetzer K. Save the crop: Photodynamic Inactivation of plant pathogens I: bacteria. *Photochem Photobiol Sci* (2019).
- Gruber M S, Muhlthaler A, Agatha S. Ultrastructural Studies on a Model Tintinnid - Schmidingerella meunieri (Kofoid and Campbell, 1929) Agatha and Struder-Kypke, 2012 (Ciliophora). I. Somatic Kinetids with Unique Ultrastructure. *Acta Protozool* (2019). 57(3): 195-214.
- Karimpour M, Feizi M A H, Mahdavi M, Krammer B, Verwanger T, Najafi F, Babaei E. Development of curcumin-loaded gemini surfactant nanoparticles: Synthesis, characterization and evaluation of anticancer activity against human breast cancer cell lines. *Phytomedicine* (2019). 57: 183-190.
- Kittl M, Jakab M, Steininger T S, Ritter M, Kerschbaum H H. A Swelling-Activated Chloride Current in Microglial Cells is Suppressed by Epac and Facilitated by PKA - Impact on Phagocytosis. *Cell Physiol Biochem* (2019). 52(5): 951-969.
- Kratzer B, Kohler C, Hofer S, Smole U, Trapin D, Iturri J, Pum D, Kienzl P, Elbe-Burger A, Gattinger P, Mittermann I, Linhart B, Gadermaier G, Jahn-Schmid B, Neunkirchner A, Valenta R, Pickl W F. Prevention of allergy by virus-like nanoparticles (VNP) delivering shielded versions of major allergens in a humanized murine allergy model. *Allergy* (2019). 74(2): 246-260.
- Maia A C D, Grimm C, Schubert M, Etl F, Goncalves E G, Do Amaral Ferraz Navarro D M, Schulz S, Dotterl S. Correction to: Novel floral scent compounds from night-blooming Araceae pollinated by cyclocephaline scarabs (Melolonthidae, Cyclocephalini). *J Chem Ecol* (2019). 45(2): 214-215.
- Maia A C D, Grimm C, Schubert M, Etl F, Goncalves E G, Do Amaral Ferraz Navarro D M, Schulz S, Dotterl S. Novel Floral Scent Compounds from Night-Blooming Araceae Pollinated by Cyclocephaline Scarabs (Melolonthidae, Cyclocephalini). *J Chem Ecol* (2019). 45(2): 204-213.
- Maleki H, Shahbazi M A, Montes S, Hosseini S H, Eskandari M R, Zaunschirm S, Verwanger T, Mathur S, Milow B, Krammer B, Husing N. Mechanically Strong Silica-Silk Fibroin Bioaerogel: A Hybrid

- Scaffold with Ordered Honeycomb Micromorphology and Multiscale Porosity for Bone Regeneration. *ACS Appl Mater Interfaces* (2019). 11(19): 17256-17269.
- Mayr B, Muller E E, Schafer C, Droese S, Breitenbach-Koller H, Schonfelder M, Niebauer J. Exercise responsive micro ribonucleic acids identify patients with coronary artery disease. *Eur J Prev Cardiol* (2019). 26(4): 348-355.
- Muller A, Gasch J, Albring K F, Aberger F, Nivarthi H, Khemeri M, Moriggl R, Friedrich K H. Interplay of transcription factors STAT3, STAT1 and AP-1 mediates activity of the matrix metalloproteinase-1 promoter in colorectal carcinoma cells. *Neoplasma* (2019). 66(3): 357-366.
- Peer E, Tesanovic S, Aberger F. Next-Generation Hedgehog/GLI Pathway Inhibitors for Cancer Therapy. *Cancers (Basel)* (2019). 11(4).
- Qu Z, Groben R, Marteinson V, Agatha S, Filker S, Stoeck T. Redescription of *Dexiotricha colpidiopsis* (Kahl, 1926) Jankowski, 1964 (Ciliophora, Oligohymenophorea) from a Hot Spring in Iceland with Identification Key for *Dexiotricha* species. *Acta Protozool* (2019). 57(2): 95-106.
- Riediker M, Zink D, Kreyling W, Oberdorster G, Elder A, Graham U, Lynch I, Duschl A, Ichihara G, Ichihara S, Kobayashi T, Hisanaga N, Umezawa M, Cheng T J, Handy R, Gulumian M, Tinkle S, Cassee F. Particle toxicology and health - where are we? *Part Fibre Toxicol* (2019).16(1): 19.
- Scarnato L, Gadermaier G, Volta U, De Giorgio R, Caio G, Lanciotti R, Del Duca S. Immunoreactivity of Gluten-Sensitized Sera Toward Wheat, Rice, Corn, and Amaranth Flour Proteins Treated With Microbial Transglutaminase. *Front Microbiol* (2019). 10: 470.
- Schallmoser A, Raab M, Karn T, Konigsberger S, Schmidt E, Breitenbach-Koller H, Sanger N. Quantitative analysis of the sHLA-G protein in seminal plasma. *Am J Reprod Immunol* (2019). e13152.
- Sgouras D, Tegtmeyer N, Wessler S. Activity and Functional Importance of *Helicobacter pylori* Virulence Factors. *Adv Exp Med Biol* (2019).
- Soh W T, Aglas L, Mueller G A, Gilles S, Weiss R, Scheiblhofer S, Huber S, Scheidt T, Thompson P M, Briza P, London R E, Traidl-Hoffmann C, Cabrele C, Brandstetter H, Ferreira F. Multiple roles of Bet v 1 ligands in allergen stabilization and modulation of endosomal protease activity. *Allergy* (2019).
- Verhoeckx K, Bogh K L, Dupont D, Egger L, Gadermaier G, Larre C, Mackie A, Menard O, Adel-Patient K, Picariello G, Portmann R, Smit J, Turner P, Untersmayr E, Epstein M M. The relevance of a digestibility evaluation in the allergenicity risk assessment of novel proteins. Opinion of a joint initiative of COST action ImpARAS and COST action INFOGEST. *Food Chem Toxicol* (2019). 129: 405-423.
- Wu X, Chu L, Xi L, Pertl-Obermeyer H, Li Z, Sklodowski K, Sanchez-Rodriguez C, Obermeyer G, Schulze W X. Sucrose-Induced Receptor Kinase 1 is modulated by an interacting kinase with short extracellular domain. *Mol Cell Proteomics* (2019).
- Xu H, Zhou G, Dotterl S, Schaffler I, von Arx M, Roder G, Degen T, Chen L, Turlings T C J. The Combined Use of an Attractive and a Repellent Sex Pheromonal Component by a Gregarious Parasitoid. *J Chem Ecol* (2019).
- Zaborsky N, Gassner F J, Hopner J P, Schubert M, Hebenstreit D, Stark R, Asslaber D, Steiner M, Geisberger R, Greil R, Egle A. Exome sequencing of the TCL1 mouse model for CLL reveals genetic heterogeneity and dynamics during disease development. *Leukemia* (2019). 33(4): 957-968.

January – March 2019

- Adl S. M, Bass D, Lane C E, Lukes J, Schoch C L, Smirnov A, Agatha S, Berney C, Brown M W, Burki F, Cardenas P, Cepicka I, Chistyakova L, Del Campo J, Dunthorn M, Edvardsen B, Eglit Y, Guillou L, Hampl V, Heiss A A, Hoppenrath M, James T Y, Karnkowska A, Karpov S, Kim E, Kolisko M, Kudryavtsev A, Lahr D J G, Lara E, Le Gall L, Lynn D H, Mann D G, Massana R, Mitchell E A D, Morrow C, Park J S, Pawlowski J W, Powell M J, Richter D J, Rueckert S, Shadwick L, Shimano S, Spiegel F W, Torruella G, Youssef N, Zlatogursky V, Zhang Q. Revisions to the Classification, Nomenclature, and Diversity of Eukaryotes. *J Eukaryot Microbiol* 2019. 66(1): 4-119.
- Choi K M, Zissler A, Kim E, Ehrenfellner B, Cho E, Lee S I, Steinbacher P, Yun K N, Shin J H, Kim J Y, Stoiber W, Chung H, Monticelli F C, Kim J Y, Pittner S. Postmortem proteomics to discover biomarkers for forensic PMI estimation. *Int J Legal Med* 2019.
- Dahms S O, Demir F, Huesgen P F, Thorn K, Brandstetter H. Sirtilins - the new old members of the vitamin K-dependent coagulation factor family. *J Thromb Haemost* 2019. 17(3): 470-481.
- Domingues F S, Konig E, Schwienbacher C, Volpato C B, Picard A, Cantalon C, Mascalzoni D, Lackner P, Heimbach A, Hoffmann P, Stanzial F, Hicks A A, Parmeggiani L, Benedicenti F, Pellegrin S, Casara G, Pramstaller P P. Compound heterozygous SZT2 mutations in two siblings with early-onset epilepsy, intellectual disability and macrocephaly. *Seizure* 2019. 66(1):81-85.
- Farkas A M, Baranyi U, Bohmig G A, Unger L, Hopf S, Wahrmann M, Regele H, Mahr B, Schwarz C, Hock K, Pilat N, Kristo I, Mraz J, Lupinek C, Thalhamer J, Bond G, Kuessel L, Wlodek E, Martin J, Clatworthy M, Pettigrew G, Valenta R, Wekerle T. Allograft rejection is associated with development of functional IgE specific for donor MHC antigens. *J Allergy Clin Immunol* 2019. 143(1): 335-345 e12.
- Fotadar R, Stoeck T, Filker S, Fell J W, Agatha S, Al Marri M, Jiang J. Corrigendum to "Description of the Halophile *Euplotes qatarensis* nov. spec. (Ciliophora, Spirotrichea, Euplotida) Isolated from the Hypersaline Khor Al-Adaid Lagoon in Qatar". *J Eukaryot Microbiol* 2019. 66(2): 370-371
- Ganser M H, Agatha S. Redescription of *Antetintinnidium mucicola* (Claparede and Lachmann, 1858) nov. gen., nov. comb. (Alveolata, Ciliophora, Tintinnina). *J Eukaryot Microbiol* 2019.
- Gao Z, Fu W Y, Sun Y, Gao B, Wang H Y, Liu M, Luo F M, Zhou X, Jin J, Zhao L, Wu S, Liu Y, Wu L, Wang X, Tang N B, Guo B H, Feng Y, Zhou J Y, Gadermaier G, Ferreira F, Versteeg S A, van Ree R. *Artemisia* pollen allergy in China: Component-resolved diagnosis reveals allergic asthma patients have significant multiple allergen sensitization. *Allergy* 2019. 74(2): 284-293.
- Heiduk A, Haenni J P, Meve U, Schulz S, Dotterl S. Flower scent of *Ceropegia stenantha*: electrophysiological activity and synthesis of novel components. *J Comp Physiol A Neuroethol Sens Neural Behav Physiol* 2019.
- Ivanov Kavkova E, Blochl C, Tenhaken R. The Myo-inositol pathway does not contribute to ascorbic acid synthesis. *Plant Biol (Stuttg)* 2019. 21 Suppl 1: 95-102.
- Klukowski P, Schubert M. Chemical shift-based identification of monosaccharide spin-systems with NMR spectroscopy to complement untargeted glycomics. *Bioinformatics* 2019. 35(2): 293-300.
- Leibe R, Hsiao I L, Fritsch-Decker S, Kielmeier U, Wagbo A M, Voss B, Schmidt A, Hessman S D, Duschl A, Oostingh G J, Diabate S, Weiss C. The protein corona suppresses the cytotoxic and pro-inflammatory response in lung epithelial cells and macrophages upon exposure to nanosilica. *Arch Toxicol* 2019.

- Lekklar C, Chadchawan S, Boon-Long P, Pfeiffer W, Chaidee A. Salt stress in rice: multivariate analysis separates four components of beneficial silicon action. *Protoplasma* 256(2): 331-347.
- Najafi N, Hofer G, Gattinger P, Smiljkovic D, Blatt K, Selb R, Stoecklinger A, Keller W, Valent P, Niederberger V, Thalhamer J, Valenta R, Flicker S. Fusion proteins consisting of Bet v 1 and Phl p 5 form IgE-reactive aggregates with reduced allergenic activity. *Sci Rep* 2019. 9(1): 4006.
- Paiva E A S, Dotterl S, De-Paula O C, Schlindwein C, Souto L S, Vitarelli N C, da Silva C I, Mateus S, Alves-Dos-Santos I, Oliveira D M T. Osmophores of *Caryocar brasiliense* (Caryocaraceae): a particular structure of the androecium that releases an unusual scent. *Protoplasma* 2019.
- Polak D, Hafner C, Briza P, Kitzmuller C, Elbe-Burger A, Samadi N, Gschwandtner M, Pflutzner W, Zlabinger G J, Jahn-Schmid B, Bohle B. A novel role for neutrophils in IgE-mediated allergy: Evidence for antigen presentation in late-phase reactions. *J Allergy Clin Immunol* 2019. 143(3): 1143-1152 e4.
- Posselt G, Wiesauer M, Chichirau B E, Engler D, Krisch L M, Gadermaier G, Briza P, Schneider S, Boccellato F, Meyer T F, Hauser-Kronberger C, Neureiter D, Muller A, Wessler S. *Helicobacter pylori*-controlled c-Abl localization promotes cell migration and limits apoptosis. *Cell Commun Signal* 2019. 17(1): 10.
- Prutsch N, Gurnhofer E, Suske T, Liang H C, Schleder M, Roos S, Wu L C, Simonitsch-Klupp I, Alvarez-Hernandez A, Kornauth C, Leone D A, Svinka J, Eferl R, Limberger T, Aufinger A, Shirsath N, Wolf P, Hielscher T, Aberger F, Schmoellerl J, Stoiber D, Strobl B, Jager U, Staber P B, Grebien F, Moriggl R, Muller M, Inghirami G G, Sanda T, Look A T, Turner S D, Kenner L, Merkel O. Dependency on the TYK2/STAT1/MCL1 axis in anaplastic large cell lymphoma. *Leukemia* 2019. 33(3): 696-709.
- Regl C, Wohlschlager T, Esser-Skala W, Wagner I, Samonig M, Holzmann J, Huber C G. Dilute-and-shoot analysis of therapeutic monoclonal antibody variants in fermentation broth: a method capability study. *MAbs* 2019. 11(3): 569-582.
- Schimke M M, Paul S, Tillmann K, Lepperdinger G, Stigler R G. Hard Tissue Augmentation of Aged Bone by Means of a Tin-Free PLLA-PCL Co-Polymer Exhibiting in vivo Anergy and Long-Term Structural Stability." *Gerontology* 2019. 65(2): 174-185.
- Schweida D, Barraud P, Regl C, Loughlin F E, Huber C G, Cabrele C, Schubert M. The NMR signature of gluconoylation: a frequent N-terminal modification of isotope-labeled proteins. *J Biomol NMR* 2019.
- Stigler R G, Schimke M M, Bigus S, Steinmuller-Nethl D, Tillmann K, Lepperdinger G. Pervasion of beta-tricalcium phosphate with nanodiamond particles yields efficient and safe bone replacement material amenable for biofunctionalization and application in large-size osseous defect healing. *Nanomedicine* 2019. 16: 250-257.
- Van Lam van T, Ivanova T, Harges K, Heindl M R, Morty R E, Bottcher-Friebertshauser E, Lindberg I, Than M E, Dahms S O, Steinmetzer T. Design, Synthesis, and Characterization of Macrocyclic Inhibitors of the Proprotein Convertase Furin. *ChemMedChem* 2019. 14(6): 673-685.
- Vieyra-Garcia P, Fink-Puches R, Porkert S, Lang R, Pochlauer S, Ratzinger G, Tanew A, Selhofer S, Paul-Gunther S, Hofer A, Gruber-Wackernagel A, Legat F, Patra V, Quehenberger F, Cerroni L, Clark R, Wolf P. Evaluation of Low-Dose, Low-Frequency Oral Psoralen-UV-A Treatment With or Without Maintenance on Early-Stage Mycosis Fungoides: A Randomized Clinical Trial. *JAMA Dermatol* 2019.

Wildner S, Huber S, Regl C, Huber C G, Lohrig U, Gadermaier G. Aptamers as quality control tool for production, storage and biosimilarity of the anti-CD20 biopharmaceutical rituximab. *Sci Rep* 2019. 9(1): 1111.

Zych M, Junker R R, Nepi M, Stpiczynska M, Stolarska B, Roguz K. Spatiotemporal variation in the pollination systems of a supergeneralist plant: is *Angelica sylvestris* (Apiaceae) locally adapted to its most effective pollinators?. *Ann Bot* 2019. 123(2): 415-428.

October - December 2018

Absolonova, M, Beilby M J, Sommer A, Hoepflinger M C, Foissner I. Surface pH changes suggest a role for H(+)/OH(-) channels in salinity response of *Chara australis*. *Protoplasma* 2018. 255(3): 851-862.

Alija, A J, Bresgen N, Bojaxhi E, Krenn M, Bajraktari I D, Eckl P M. River pollution in the Kosovo: Cytotoxic and genotoxic effects of water samples in the primary rat hepatocyte assay. *Toxicol Ind Health* (2018). 34(8): 563-570.

Antonucci Di Carvalho J, Wickham S A. Simulating eutrophication in a metacommunity landscape: an aquatic model ecosystem. *Oecologia* (2018).

Binder S, Luciano M, Horejs-Hoeck J. The cytokine network in acute myeloid leukemia (AML): A focus on pro- and anti-inflammatory mediators. *Cytokine Growth Factor* (2018). Rev 43: 8-15.

Breitenbach M, Hoffmann J. Editorial: Cancer Models. *Front Oncol* (2018). 8: 401.

Bukowski, A R, Schittko C, Petermann J S. The strength of negative plant-soil feedback increases from the intraspecific to the interspecific and the functional group level. *Ecol Evol* (2018). 8(4): 2280-2289.

Busch V, Klaus V H, Penone C, Schafer D, Boch S, Prati D, Muller J, Socher S A, Niinemets U, Penuelas J, Holzel N, Fischer M, Kleinebecker T. Nutrient stoichiometry and land use rather than species richness determine plant functional diversity. *Ecol Evol* (2018). 8(1): 601-616.

Carmona-Gutierrez D, Bauer M A, Zimmermann A, Aguilera A, Austriaco N, Ayscough K, Balzan R, Bar-Nun S, Barrientos A, Belenky P, Blondel M, Braun R J, Breitenbach M, Burhans W C, Buttner S, Cavalieri D, Chang M, Cooper K F, Corte-Real M, Costa V, Cullin C, Dawes I, Dengjel J, Dickman M B, Eisenberg T, Fahrenkrog B, Fasel N, Frohlich K U, Gargouri A, Giannattasio S, Goffrini P, Gourlay C W, Grant C M, Greenwood M T, Guaragnella N, Heger T, Heinisch J, Herker E, Herrmann J M, Hofer S, Jimenez-Ruiz A, Jungwirth H, Kainz K, Kontoyiannis D P, Ludovico P, Manon S, Martegani E, Mazzoni C, Megeney L A, Meisinger C, Nielsen J, Nystrom T, Osiewacz H D, Outeiro T F, Park H O, Pendl T, Petranovic D, Picot S, Polcic P, Powers T, Ramsdale M, Rinnerthaler M, Rockenfeller P, Ruckenstein C, Schaffrath R, Segovia M, Severin F F, Sharon A, Sigrist S J, Sommer-Ruck C, Sousa M J, Thevelein J M, Thevissen K, Titorenko V, Toledano M B, Tuite M, Vogtle F N, Westermann B, Winderickx J, Wissing S, Wolfl S, Zhang Z J, Zhao R Y, Zhou B, Galluzzi L, Kroemer G, Madeo F. Guidelines and recommendations on yeast cell death nomenclature. *Microb Cell* (2018). 5(1): 4-31.

Cherkas A, Golota S, Gueraud F, Abrahamovych O, Pichler C, Nersesyan A, Krupak V, Bugiichyk V, Yatskevych O, Pliatsko M, Eckl P, Knasmüller S. A *Helicobacter pylori*-associated insulin resistance in asymptomatic sedentary young men does not correlate with inflammatory markers and urine levels of 8-iso-PGF2- α or 1,4-dihydroxynonane mercapturic acid. *Arch Physiol Biochem* (2018). 124(3): 275-285.

- Dahms S O, Harges K, Steinmetzer T, Than M E. X-ray Structures of the Proprotein Convertase Furin Bound with Substrate Analogue Inhibitors Reveal Substrate Specificity Determinants beyond the S4 Pocket. *Biochemistry* (2018). 57(6): 925-934.
- Gassner F J, Schubert M, Rebhandl S, Spandl K, Zaborsky N, Catakovic K, Blaimer S, Hebenstreit D, Greil R, Geisberger R. Imprecision and DNA Break Repair Biased towards Incompatible End Joining in Leukemia. *Mol Cancer Res* (2018). 16(3): 428-438.
- Grassi L, Roschger C, Stanojlovic V, Cabrele C. An explorative study towards the chemical synthesis of the immunoglobulin G1 Fc CH3 domain. *J Pept Sci* (2018). 24(12): e3126.
- Helm K, Viol K, Weiger T M, Tass P A, Grefkes C, Del Monte D, Schiepek G. Neuronal connectivity in major depressive disorder: a systematic review. *Neuropsychiatr Dis Treat* (2018). 14: 2715-2737.
- Hochmann S, Mittermeir M, Santic R, Koszik F, Griessner L, Sonderegger A S, Hoffmann T, Russe E, Scheibelhofer S, Weiss R, Mandler M, Schneeberger A, Strunk D. Evaluation of modified Interferon alpha mRNA constructs for the treatment of non-melanoma skin cancer. *Sci Rep* (2018). 8(1): 12954.
- Huber S, Lang R, Steiner M, Aglas L, Ferreira F, Wallner M, Hawranek T, Gadermaier G. Does clinical outcome of birch pollen immunotherapy relate to induction of blocking antibodies preventing IgE from allergen binding? A pilot study monitoring responses during first year of AIT. *Clin Transl Allergy* (2018). 8: 39.
- Junker R R, Kuppler J, Arno L, Blande J D, Borges R M, van Dam N M, Dicke M, Dotterl S, Ehlers B K, Etl F, Gershenzon J, Glinwood R, Gols R, Groot A T, Heil M, Hoffmeister M, Holopainen, J K, Jarau S, John L, Kessler A, Knudsen J T, Kost C, Larue-Kontic A C, Leonhardt S D, Lucas-Barbosa D, Majetic C J, Menzel F, Parachnowitsch A L, Pasquet R S, Poelman E H, Raguso R A, Ruther J, Schiestl F P, Schmitt T, Tholl D, Unsicker S B, Verhulst N, Visser M E, Weldegergis B T, Kollner T G. Covariation and phenotypic integration in chemical communication displays: biosynthetic constraints and eco-evolutionary implications. *New Phytol* (2018). 220(3): 739-749.
- Kittl M, Dobias H, Beyreis M, Kiesslich T, Mayr C, Gaisberger M, Ritter M, Kerschbaum H H, Jakab M. Glycine Induces Migration of Microglial BV-2 Cells via SNAT-Mediated Cell Swelling. *Cell Physiol Biochem* (2018). 50(4): 1460-1473.
- Kratzer B, Kohler C, Hofer S, Smole U, Trapin D, Iturri J, Pum D, Kienzl P, Elbe-Burger A, Gatteringer P, Mittermann I, Linhart B, Gadermaier G, Jahn-Schmid B, Neunkirchner A, Valenta R, Pickl W F. Prevention of allergy by virus-like nanoparticles (VNP) delivering shielded versions of major allergens in a humanized murine allergy model. *Allergy* (2018).
- Loessner D, Goettig P, Preis S, Felber J, Bronger H, Clements J A, Dorn J, Magdolen V. Kallikrein-related peptidases represent attractive therapeutic targets for ovarian cancer. *Expert Opin Ther Targets* (2018). 22(9): 745-763.
- Maia A C D, Grimm C, Schubert M, Etl F, Goncalves E G, Do Amaral Ferraz Navarro D M, Schulz S, Dotterl S. Correction to: Novel floral scent compounds from night-blooming Araceae pollinated by cyclocephaline scarabs (Melolonthidae, Cyclocephalini). *J Chem Ecol* (2018). The original version of this article unfortunately contained a mistake. The description of subheadings of Figs. 4c and d have to be interchanged.
- Mayr B, Muller E E, Schafer C, Droese S, Breitenbach-Koller H, Schonfelder M, Niebauer J. Exercise responsive micro ribonucleic acids identify patients with coronary artery disease. *Eur J Prev Cardiol* (2018): 2047487318808014.

- Miedl S F, Wegerer M, Kerschbaum H, Blechert J, Wilhelm F H. Neural activity during traumatic film viewing is linked to endogenous estradiol and hormonal contraception. *Psychoneuro-endocrinology* (2018). 87: 20-26.
- Nivarthi H, Gordziel C, Themanns M, Kramer N, Eberl M, Rabe B, Schleder M, Rose-John S, Knosel T, Kenner L, Freund P, Aberger F, Han X, Kralovics R, Dolznig H, Jennek S, Friedrich K, Moriggl R. Correction: The ratio of STAT1 to STAT3 expression is a determinant of colorectal cancer growth. *Oncotarget* (2018). 9(73): 33865. This corrects the article DOI: 10.18632/oncotarget.9315.
- Pomes A, Davies J M, Gadermaier G, Hilger C, Holzhauser T, Lidholm J, Lopata A L, Mueller G A, Nandy A, Radauer C, Chan S K, Jappe U, Kleine-Tebbe J, Thomas W R, Chapman M D, van Hage M, van Ree R, Vieths S, Raulf M, Goodman R E, Who Luis Allergen Nomenclature Sub-Committee. WHO/IUIS Allergen Nomenclature: Providing a common language. *Mol Immunol* (2018). 100: 3-13.
- Schubert M, Greil R, Geisberger, R. Risks and chances of aberrant DNA repair in cancer. *Oncoscience* (2018). 5 (9-10): 256-257.
- Schulke S, Kuttich K, Wolfheimer S, Duschek N, Wangorsch A, Reuter A, Briza P, Pablos I, Gadermaier G, Ferreira F, Vieths S, Toda M, Scheurer S. Author Correction: Conjugation of wildtype and hypoallergenic mugwort allergen Art v 1 to flagellin induces IL-10-DC and suppresses allergen-specific TH2-responses in vivo. *Sci Rep* (2018). 8(1): 2745. A correction to this article has been published and is linked from the HTML version of this paper. The error has been fixed in the paper.
- Spaeth A, Graeler A, Maisch T, Plaetzer K. CureCuma-cationic curcuminoids with improved properties and enhanced antimicrobial photodynamic activity. *Eur J Med Chem* (2018). 159: 423-440.
- Stemeseder T, Metz-Favre C, de Blay F, Pauli G, Gadermaier G. Do *Plantago lanceolata* Skin Prick Test-Positive Patients Display IgE to Genuine Plantain Pollen Allergens? Investigation of Pollen Allergic Patients from the North-East of France. *Int Arch Allergy Immunol* (2018). 177(2): 97-106.
- Stock L G, Wildner S, Regl C, Gadermaier G, Huber C G, Stutz H. Monitoring of Deamidation and Lanthionine Formation in Recombinant Mugwort Allergen by Capillary Zone Electrophoresis (CZE)-UV and Transient Capillary Isotachophoresis-CZE-Electrospray Ionization-TOF-MS. *Anal Chem* (2018). 90(20): 11933-11940.
- Vitkov L, Hannig M, Minnich B, Herrmann M. Periodontal sources of citrullinated antigens and TLR agonists related to RA. *Autoimmunity* (2018). 51(6): 304-309.
- Zaborsky N, Gassner F J, Hopner J P, Schubert M, Hebenstreit D, Stark R, Asslaber D, Steiner M, Geisberger R, Greil R, Egle A. Exome sequencing of the TCL1 mouse model for CLL reveals genetic heterogeneity and dynamics during disease development. *Leukemia*. (2018).

July - September 2018

- Adl S M, Bass , Lane C E, Lukes J, Schoch C L, Smirnov A, Agatha S, Berney C, Brown M W, Burki F, Cardenas P, Cepicka I, Chistyakova, L, Del Campo J, Dunthorn M, Edvardsen B, Eglit Y, Guillou L, Hampl V, Heiss A A, Hoppenrath M, James T Y, Karpov S, Kim E, Kolisko M, Kudryavtsev A, Lahr D J G, Lara E, Le Gall L, Lynn D H, Mann D G, Massana I, Molera R, Mitchell E A D, Morrow C, Park J S, Pawlowski J W, Powell M J, Richter D J, Rueckert S, Shadwick L, Shimano S, Spiegel

- F W, Torruella I, Cortes G, Youssef N, Zlatogursky V, Zhang Q. Revisions to the Classification, Nomenclature, and Diversity of Eukaryotes. *J Eukaryot Microbiol* 2018.
- Bannar-Martin K H, Kremer C T, Ernest S K M, Leibold M A, Auge H, Chase J, Declerck S A J, Eisenhauer N, Harpole S, Hillebrand H, Isbell F, Koffel T, Larsen S, Narwani A, Petermann J S, Roscher C, Cabral J S, Supp S R. Integrating community assembly and biodiversity to better understand ecosystem function: the Community Assembly and the Functioning of Ecosystems (CAFE) approach. *Ecol Lett* 2018. 21(2): 167-180.
- Breitenbach M, Rinnerthaler M, Weber M, Breitenbach-Koller H, Karl T, Cullen P, Basu S, Haskova D, Hasek J. The defense and signaling role of NADPH oxidases in eukaryotic cells: Review. *Wien Med Wochenschr* 2018. 168(11-12): 286-299.
- Burdon R C F, Junker R R, Scofield D G, Parachnowitsch A L. Bacteria colonising *Penstemon digitalis* show volatile and tissue-specific responses to a natural concentration range of the floral volatile linalool. *Chemoecology* 2018. 28(1): 11-19.
- Busse A, Antiquera P A P, Neutzling A S, Wolf A M, Romero G Q, Petermann J S. Different in the dark: The effect of habitat characteristics on community composition and beta diversity in bromeliad microfauna. *PLoS One* 2018. 13(2): e0191426.
- da Silva M B, Urrego A J, Oviedo Y, Cooper P J, Pacheco L G C, Pinheiro C S, Ferreira F, Briza P, Alcantara-Neves N M. The somatic proteins of *Toxocara canis* larvae and excretory-secretory products revealed by proteomics. *Vet Parasitol* 2018. 259: 25-34.
- Debela M, Magdolen V, Skala W, Elsasser B, Schneider E L, Craik C S, Biniossek M L, Schilling O, Bode W, Brandstetter H, Goettig P. Structural determinants of specificity and regulation of activity in the allosteric loop network of human KLK8/neurosin. *Sci Rep* 2018. 8(1): 10705.
- Farkas A M, Baranyi U, Bohmig G A, Unger L, Hopf S, Wahrmann M, Regele H, Mahr B, Schwarz C, Hock K, Pilat N, Kristo I, Mraz J, Lupinek C, Thalhamer J, Bond G, Kuessel L, Wlodek E, Martin J, Clatworthy M, Pettigrew G, Valenta R, Wekerle T. Allograft rejection is associated with development of functional IgE specific for donor MHC antigens. *J Allergy Clin Immunol* 2018.
- Galler S, Linke W A. A personal tribute to Johann Caspar Ruegg (1930-2018): milestones of muscle research. *Biophys Rev* 2018.
- Gao Z S, Fu W Y, Sun Y M, Gao B Y, Wang H Y, Liu M L, Luo F M, Zhou X, Jin J, Zhao L, Wu S D, Liu Y, Wu L Y, Wang X F, Tang N B, Guo B H, Feng Y, Zhou, J Y, Gadermaier G, Ferreira F, Versteeg S A, van Ree R. *Artemisia* pollen allergy in China: component-resolved diagnosis reveals allergic asthma patients have significant multiple allergen sensitization. *Allergy* 2018.
- Gruber M S, Struder-Kypke M, Agatha S.(2018). Redescription of *Tintinnopsis everta* Kofoid and Campbell 1929 (Alveolata, Ciliophora, Tintinnina) Based on Taxonomic and Genetic Analyses-Discovery of a New Complex Ciliary Pattern. *J Eukaryot Microbiol* 2018. 65(4): 484-504.
- Guimaraes E, Tunes P, de Almeida Junior L D, Di Stasi L C, Dotterl S, Machado S R. "Nectar Replaced by Volatile Secretion: A Potential New Role for Nectarless Flowers in a Bee-Pollinated Plant Species. *Front Plant Sci* 2018. 9: 1243.
- Guo S, Briza P, Magdolen V, Brandstetter H, Goettig P. Activation and activity of glycosylated KLKs 3, 4 and 11. *Biol Chem* 2018. 399(9): 1009-1022.
- Heethoff M, Brückner A, Schmelzle S, Schubert M, Bräuer M, Meusinger R, Dötterl S, Norton R A, Rasputnig G. Life as a fortress – structure, function, and adaptive values of morphological and

- chemical defense in the oribatid mite *Euphthiracarus reticulatus* (Actinotrichida). *BMC Zoology* 2018. 3, 7.
- Ivanov Kavkova E, Blochl C, Tenhaken R. The Myo-inositol pathway does not contribute to ascorbic acid synthesis. *Plant Biol (Stuttg)* 2018.
- Jaros U, Tribsch A, Comes H P. Diversification in continental island archipelagos: new evidence on the roles of fragmentation, colonization and gene flow on the genetic divergence of Aegean *Nigella* (Ranunculaceae). *Ann Bot* 2018. 121(2): 241-254.
- Junker R R. A biosynthetically informed distance measure to compare secondary metabolite profiles. *Chemoecology* 2018. 28(1): 29-37.
- Kawczyk-Krupka A, Kwiatek B, Czuba Z P, Mertas A, Latos W, Verwanger T, Krammer B, Sieron A. Secretion of the angiogenic factor VEGF after photodynamic therapy with ALA under hypoxia-like conditions in colon cancer cells. *Photodiagnosis Photodyn Ther* 2018. 21: 16-18.
- Killer-Oberpfalzer M, Kocer N, Griessenauer C J, Janssen H, Engelhorn T, Holtmannspotter M, Buhk J H, Finkenzeller T, Fesl G, Trenkler J, Reith W, Berlis A, Hausegger K, Augustin M, Islak C, Minnich B, Mohlenbruch M. European Multicenter Study for the Evaluation of a Dual-Layer Flow-Diverting Stent for Treatment of Wide-Neck Intracranial Aneurysms: The European Flow-Redirection Intraluminal Device Study. *AJNR Am J Neuroradiol* 2018. 39(5): 841-847.
- Klukowski P, Schubert M. Chemical shift-based identification of monosaccharide spin-systems with NMR spectroscopy to complement untargeted glycomics. *Bioinformatics* 2018.
- Krug C, Cordeiro G D, Schaffler I, Silva C I, Oliveira R, Schlindwein C, Dotterl S, Alves-Dos-Santos I. Nocturnal Bee Pollinators Are Attracted to Guarana Flowers by Their Scents." *Front Plant Sci* 2018. 9: 1072.
- Lametschwandtner A, Minnich B. Microvascular anatomy of the brain of the adult pipid frog, *Xenopus laevis* (Daudin): A scanning electron microscopic study of vascular corrosion casts. *J Morphol* 2018. 279(7): 950-969.
- Lekklar C, Chadchawan S, Boon-Long P, Pfeiffer W, Chaidee A. Salt stress in rice: multivariate analysis separates four components of beneficial silicon action. *Protoplasma* 2018.
- Litschko C, Oldrini D, Budde I, Berger M, Meens J, Gerardy-Schahn R, Berti F, Schubert M, Fiebig T. A New Family of Capsule Polymerases Generates Teichoic Acid-Like Capsule Polymers in Gram-Negative Pathogens. *mBio* 2018. 8, e00641-18.
- Maia A C D, Grimm C, Schubert M, Etl F, Goncalves E G, Do Amaral Ferraz Navarro D M, Schulz S, Dotterl S. Novel Floral Scent Compounds from Night-Blooming Araceae Pollinated by Cyclocephaline Scarabs (Melolonthidae, Cyclocephalini). *J Chem Ecol* 2018.
- Maria V L, Licha D, Scott-Fordsmand J J, Huber C G, Amorim M J B. The Proteome of *Enchytraeus crypticus*-Exposure to CuO Nanomaterial and CuCl₂ -in Pursue of a Mechanistic Interpretation. *Proteomics* 2018: e1800091.
- Marotz-Clausen G, Jurschik S, Fuchs R, Schaffler I, Sulzer P, Gibernau M, Dotterl S. Incomplete synchrony of inflorescence scent and temperature patterns in *Arum maculatum* L. (Araceae). *Phytochemistry* 2018. 154: 77-84.
- Moraes A H, Asam C, Almeida F C L, Wallner M, Ferreira F, Valente A P. Structural basis for cross-reactivity and conformation fluctuation of the major beech pollen allergen Fag s 1. *Sci Rep* 2018. 8(1): 10512.

- Niedermeier M, Gierlinger N, Lutz-Meindl U. Biomineralization of strontium and barium contributes to detoxification in the freshwater alga *Micrasterias*. *J Plant Physiol* 2018. 230: 80-91.
- Parkinson J H, Kutil R, Kuppler J, Junker R R, Trutschnig W, Bathke A C. A Fast and Robust Way to Estimate Overlap of Niches, and Draw Inference. *Int J Biostat* 2018.
- Pertl-Obermeyer H, Lackner P, Schulze W X, Hoepflinger, M C, Hoefftberger M, Foissner I, Obermeyer G. Dissecting the subcellular membrane proteome reveals enrichment of H⁺ (co-)transporters and vesicle trafficking proteins in acidic zones of *Chara* internodal cells. *PLoS One* 2018. 13(8): e0201480.
- Prutsch N, Gurnhofer E, Suske T, Liang H C, Schlederer M, Roos S, Wu L C, Simonitsch-Klupp I, Alvarez-Hernandez A, Kornauth C, Leone D A, Svinka J, Eferl R, Limberger T, Aufinger A, Shirsath N, Wolf P, Hielscher T, Aberger F, Schmoellerl J, Stoiber D, Strobl B, Jager U, Staber P B, Grebien F, Moriggl R, Muller M, Inghirami G G, Sanda T, Look A T, Turner S D, Kenner L, Merkel O. Dependency on the TYK2/STAT1/MCL1 axis in anaplastic large cell lymphoma. *Leukemia* 2018.
- Scheiblhofer S, Thalhamer J, Weiss R. DNA and mRNA vaccination against allergies. *Pediatr Allergy Immunol* 2018.
- Steiner P, Luckner M, Kerschbaum H, Wanner G, Lutz-Meindl U. Ionic stress induces fusion of mitochondria to 3-D networks: An electron tomography study. *J Struct Biol* 2018. 204(1): 52-63.
- Sternberg C, Gruber W, Eberl M, Tesanovic S, Stadler M, Elmer D P, Schlederer M, Grund S, Roos S, Wolff F, Kaur S, Mangelberger D, Lehrach H, Hache H, Wierling C, Laimer J, Lackner P, Wiederstein M, Kasper M, Risch A, Petzelbauer P, Moriggl R, Kenner L, Aberger F. Synergistic Cross-Talk of Hedgehog and Interleukin-6 Signaling Drives Growth of Basal Cell Carcinoma. *Int J Cancer* 2018.
- Stigler R G, Becker K, Kloss F R, Gassner R, Lepperdinger G. Long-lived murine osteocytes are embodied by craniofacial skeleton in young and old animals whereas they decrease in number in postcranial skeletons at older ages. *Gerodontology* 2018.
- Stigler R G, Schimke M M, Bigus S, Steinmuller-Nethl D, Tillmann K, Lepperdinger G. Pervasion of Beta-tricalcium phosphate with Nanodiamond particles yields efficient and safe bone replacement material amenable for biofunctionalization and application in large-size osseous defect healing. *Nanomedicine (Lond)* 2018.
- Zych M, Junker R R, Nepi M, Stpiczynska M, Stolarska B, Roguz K. Spatiotemporal variation in the pollination systems of a supergeneralist plant: is *Angelica sylvestris* (Apiaceae) locally adapted to its most effective pollinators? *Ann Bot* 2018.

April - June 2018

- Aglas L, Gilles S, Bauer R, Huber S, Araujo G R, Mueller G, Scheiblhofer S, Amisi M, Dang H H, Briza P, Bohle B, Horejs-Hoeck J, Traidl-Hoffmann C, Ferreira F. Context matters: TH2 polarization resulting from pollen composition and not from protein-intrinsic allergenicity. *J Allergy Clin Immunol* 2018.
- Ali N, Zirak B, Truong H A, Maurano M M, Gratz I K, Abbas A K, Rosenblum M D. Skin-Resident T Cells Drive Dermal Dendritic Cell Migration in Response to Tissue Self-Antigen. *J Immunol* 2018: 200(9): 3100-3108.

- Asam C, Roulias A, Parigiani M A, Haab A, Wallner M, Wolf M, Briza P, Bohle B, Ferreira F, Hauser M. Harmonization of the Genetic Code Effectively Enhances the Recombinant Production of the Major Birch Pollen Allergen Bet v 1. *Int Arch Allergy Immunol* 2018: 1-7.
- Backert S, Bernegger S, Skorko-Glonek J, Wessler S. Extracellular HtrA serine proteases: An emerging new strategy in bacterial pathogenesis. *Cell Microbiol* 2018; 20(6): e12845.
- Chen C Y, Melo E, Jakob P, Friedlein A, Elsasser B, Goettig P, Kueppers V, Delobel F, Stucki C, Dunkley T, Fauser S, Schilling O, Iacone R. N-Terminomics identifies HtrA1 cleavage of thrombospondin-1 with generation of a proangiogenic fragment in the polarized retinal pigment epithelial cell model of age-related macular degeneration. *Matrix Biol* 2018.
- Crabtree J E, Wessler S. Special Issue - H. pylori Virulence Factors in the Induction of Gastric Cancer. *Toxins (Basel)* 2018. 10(5).
- Dall E, Hollerweger J C, Dahms S O, Cui H, Haussermann K, Brandstetter H. Structural and functional analysis of cystatin E reveals enzymologically relevant dimer and amyloid fibril states. *J Biol Chem* 2018.
- Gruber W, Peer E, Elmer D P, Sternberg C, Tesanovic S, Del Burgo P, Coni S, Canettieri G, Neureiter D, Bartz R, Kohlhof H, Vitt D, Aberger F. Targeting class I histone deacetylases by the novel small molecule inhibitor 4SC-202 blocks oncogenic hedgehog-Gli signaling and overcomes smoothened inhibitor resistance. *Int J Cancer* 2018. 142(5): 968-975.
- Gusakov S, Stutz H. Top-down and bottom-up characterization of nitrated birch pollen allergen Bet v 1a with CZE hyphenated to an Orbitrap mass spectrometer. *Electrophoresis* 2018. 39(9-10): 1190-1200.
- Gutjahr J C, Szenes E, Tschach L, Asslaber D, Schleder M, Roos S, Yu X, Girbl T, Sternberg C, Egle A, Aberger F, Alon R, Kenner L, Greil R, Orian-Rousseau V, Hartmann T N. Microenvironment-induced CD44v6 promotes early disease progression in chronic lymphocytic leukemia. *Blood* 2018. 131(12): 1337-1349.
- Hollerweger J C, Hoppe I J, Regl C, Stock L G, Huber C G, Lohrig U, Stutz H, Brandstetter H. Analytical Cascades of Enzymes for Sensitive Detection of Structural Variations in Protein Samples. *Anal Chem* 2018. 90(8): 5055-5065.
- Kahler U, Fuchs J E, Goettig P, Liedl K R. An unexpected switch in peptide binding mode: from simulation to substrate specificity. *J Biomol Struct Dyn* 2018: 1-13.
- Kawczyk-Krupka A, Czuba Z, Latos W, Wasilewska K, Verwanger T, Krammer B, Sieron A. Influence of ALA-mediated photodynamic therapy on secretion of interleukins 6, 8 and 10 by colon cancer cells in vitro. *Photodiagnosis Photodyn Ther* 2018. 22: 137-139.
- Klicznik M M, Szenes-Nagy A B, Campbell D J, Gratz I K. Taking the lead - how keratinocytes orchestrate skin T cell immunity. *Immunol Lett* 2018.
- Magnen M, Elsasser B M, Zbodakova O, Kasperek P, Gueugnon F, Petit-Courty A, Sedlacek R, Goettig P, Courty Y. Kallikrein-related peptidase 5 and seasonal influenza viruses, limitations of the experimental models for activating proteases. *Biol Chem* 2018.
- Maria V L, Licha D, Ranninger C, Scott-Fordsmand J J, Huber C G, Amorim M J B. The *Enchytraeus crypticus* stress metabolome - CuO NM case study. *Nanotoxicology* 2018: 1-15.

- Michelini S, Sarajlic M, Duschl A, Horejs-Hoeck J. IL-1 β induces expression of costimulatory molecules and cytokines but not immune feedback regulators in dendritic cells. *Hum Immunol* 2018.
- Polak D, Hafner C, Briza P, Kitzmuller C, Elbe-Burger A, Samadi N, Gschwandtner M, Pflutzner W, Zlabinger G J, Jahn-Schmid B, Bohle B. A novel role for neutrophils in IgE-mediated allergy: evidence for antigen-presentation in late-phase reactions. *J Allergy Clin Immunol* 2018.
- Roschger C, Schubert M, Regl C, Andosch A, Marquez A, Berger T, Huber C G, Lutz-Meindl U, Cabrele C. The Recombinant Inhibitor of DNA Binding Id2 Forms Multimeric Structures via the Helix-Loop-Helix Domain and the Nuclear Export Signal. *Int J Mol Sci* 2018. 19(4).
- Sauer E, Gauer B, Nascimento S, Nardi J, Goethel G, Costa B, Correia D, Matte U, Charao M, Arbo M, Duschl A, Moro A, Garcia S C. The role of B7 costimulation in benzene immunotoxicity and its potential association with cancer risk. *Environ Res* 2018. 166: 91-99.
- Schilling O, Biniossek M L, Mayer B, Elsasser B, Brandstetter H, Goettig P, Stenman U H, Koistinen H. Specificity profiling of human trypsin-isoenzymes. *Biol Chem* 2018.
- Schinagl A, Kerschbaumer R J, Sabarth N, Douillard P, Scholz P, Voelkel D, Hollerweger J C, Goettig P, Brandstetter H, Scheiflinger F, Thiele M. Role of the Cysteine 81 Residue of Macrophage Migration Inhibitory Factor as a Molecular Redox Switch. *Biochemistry* 2018. 57(9): 1523-1532.
- Skala W, Wohlschlager T, Senn S, Huber G E, Huber C G. MoFi: A Software Tool for Annotating Glycoprotein Mass Spectra by Integrating Hybrid Data from the Intact Protein and Glycopeptide Level. *Anal Chem* 2018. 90(9): 5728-5736.
- Streubel M K, Bischof J, Weiss R, Duschl J, Liedl W, Wimmer H, Breitenbach M, Weber M, Geltinger F, Richter K, Rinnerthaler M. Behead and live long or the tale of cathepsin L. *Yeast* 2018. 35(2): 237-249.
- Westmeier D, Hahlbrock A, Reinhardt C, Frohlich-Nowoisky J, Wessler S, Vallet C, Poschl U, Knauer S K, Stauber R H. Nanomaterial-microbe cross-talk: physicochemical principles and (patho)biological consequences. *Chem Soc Rev* 2018.
- Wohlschlager T, Scheffler K, Forstenlehner I C, Skala W, Senn S, Damoc E, Holzmann J, Huber C G. Native mass spectrometry combined with enzymatic dissection unravels glycoform heterogeneity of biopharmaceuticals. *Nat Commun* 2018. 9(1): 1713.
- Wolf M, Aglas L, Twaroch T E, Steiner M, Huber S, Hauser M, Hofer H, Parigiani M A, Ebner C, Bohle B, Briza P, Neubauer A, Stolz F, Wallner M, Ferreira F. Endolysosomal protease susceptibility of Amb a 1 as a determinant of allergenicity. *J Allergy Clin Immunol* 2018. 141(4): 1488-1491 e1485.
- Zauner F B, Elsasser B, Dall E, Cabrele C, Brandstetter H. Structural analyses of *Arabidopsis thaliana* legumain gamma reveal differential recognition and processing of proteolysis and ligation substrates. *J Biol Chem* 2018. 293(23): 8934-8946.
- Zimara N, Chanyalew M, Aseffa A, van Zandbergen G, Lepenies B, Schmid M, Weiss R, Rasche A, Wege A K, Jantsch J, Schatz V, Brown G D, Ritter U. Dectin-1 Positive Dendritic Cells Expand after Infection with *Leishmania major* Parasites and Represent Promising Targets for Vaccine Development. *Front Immunol* 2018. 9: 263.

- Aebersold R, Agar J N, Amster I J, Baker M S, Bertozzi C R, Boja E S, Costello C E, Cravatt B F, Fenselau C, Garcia B A, Ge Y, Gunawardena J, Hendrickson R C, Hergenrother P J, Huber C G, Ivanov A R, Jensen O N, Jewett M C, Kelleher N L, Kiessling L L, Krogan N J, Larsen M R, Loo J A, Ogorzalek Loo R R, Lundberg E, MacCoss M J, Mallick P, Mootha V K, Mrksich M, Muir T W, Patrie S M, Pesavento J J, Pitteri S J, Rodriguez H, Saghatelian A, Sandoval W, Schluter H, Sechi S, Slavoff S A, Smith L M, Snyder M P, Thomas P M, Uhlen M, Van Eyk J E, Vidal M, Walt D R, White F M, Williams E R, Wohlschlager T, Wysocki V H, Yates N A, Young N L, Zhang B. How many human proteoforms are there? *Nat Chem Biol* 2018. 14(3): 206-214.
- Kitzmuller C, Kalser J, Mutschlechner S, Hauser M, Zlabinger G J, Ferreira F, Bohle B. Fusion proteins of flagellin and the major birch pollen allergen Bet v 1 show enhanced immunogenicity, reduced allergenicity, and intrinsic adjuvanticity. *J Allergy Clin Immunol* 2018. 141(1): 293-299 e296.
- Pablos I, Eichhorn S, Machado Y, Briza P, Neunkirchner A, Jahn-Schmid B, Wildner S, Soh W T, Ebner C, Park J W, Pickl W F, Arora N, Vieths S, Ferreira F, Gadermaier G. Distinct epitope structures of defensin-like proteins linked to proline-rich regions give rise to differences in their allergenic activity. *Allergy* 2018. 73(2): 431-441.
- Roschger C, Verwanger T, Krammer B, Cabrele C. Reduction of cancer cell viability by synergistic combination of photodynamic treatment with the inhibition of the Id protein family. *J Photochem Photobiol* 2018. B 178: 521-529.
- Schulke S, Kuttich K, Wolfheimer S, Duschek N, Wangorsch A, Reuter A, Briza P, Pablos I, Gadermaier G, Ferreira F, Vieths S, Toda M, Scheurer S. Conjugation of wildtype and hypoallergenic mugwort allergen Art v 1 to flagellin induces IL-10-DC and suppresses allergen-specific TH2-responses in vivo. *Sci Rep* 2018. 8(1): 2745.
- Zauner F B, Dall E, Regl C, Grassi L, Huber C G, Cabrele C, Brandstetter H. Crystal structure of plant legumain reveals a unique two-chain state with pH-dependent activity regulation. *Plant Cell* 2018.

October - December 2017

- Bauer J W, Koller J, Murauer E M, De Rosa L, Enzo E, Carulli S, Bondanza S, Recchia A, Muss W, Diem A, Mayr E, Schlager P, Gratz I K, Pellegrini G, De Luca M. Closure of a Large Chronic Wound through Transplantation of Gene-Corrected Epidermal Stem Cells. *J Invest Dermatol* 2017. 137(3): 778-781.
- Grassi L, Regl C, Wildner S, Gadermaier G, Huber C G, Cabrele C, Schubert M. Complete NMR Assignment of Succinimide and Its Detection and Quantification in Peptides and Intact Proteins. *Anal Chem* 2017. 89(22): 11962-11970.
- Gruber W, Peer E, Elmer D P, Sternberg C, Tesanovic S, Del Burgo P, Coni S, Canettieri G, Neureiter D, Bartz R, Kohlhof H, Vitt D, Aberger F. Targeting class I histone deacetylases by the novel small molecule inhibitor 4SC-202 blocks oncogenic hedgehog-Gli signaling and overcomes smoothened inhibitor resistance. *Int J Cancer* 2017.
- Kahler U, Fuchs J E, Goettig P, Liedl K R. An Unexpected Switch in Peptide Binding Mode: From Simulation to Substrate Specificity. *J Biomol Struct Dyn* 2017. 1-37.
- Li Y, Shi Z, Radauer-Preiml I, Andosch A, Casals E, Luetz-Meindl U, Cobaleda M, Lin Z, Jaber-Douraki M, Italiani P, Horejs-Hoeck J, Himly M, Monteiro-Riviere N A, Duschl A, Puentes V F, Boraschi D. Bacterial endotoxin (lipopolysaccharide) binds to the surface of gold nanoparticles, interferes

with biocorona formation and induces human monocyte inflammatory activation. *Nanotoxicology* 2017. 11(9-10): 1157-1175.

Roschger C, Verwanger T, Krammer B, Cabrele C (2017). Reduction of cancer cell viability by synergistic combination of photodynamic treatment with the inhibition of the Id protein family. *J Photochem Photobiol B* 2017. 178: 521-529.

Ruggenthaler M, Grass J, Schuh W, Huber C G, Reischl R J. Impurity profiling of liothyronine sodium by means of reversed phase HPLC, high resolution mass spectrometry, on-line H/D exchange and UV/Vis absorption. *J Pharm Biomed Anal* 2017. 143: 147-158.

Soh W T, Briza P, Dall E, Asam C, Schubert M, Huber S, Aglas L, Bohle B, Ferreira F, Brandstetter H. Two Distinct Conformations in Bet v 2 Determine Its Proteolytic Resistance to Cathepsin S. *Int J Mol Sci* 2017. 18(10).

Stemeseder T, Klinglmayr E, Moser S, Lueftenegger L, Lang R, Himly M, Oostingh G J, Zumbach J, Bathke A C, Hawranek T, Gadermaier G. Cross-sectional study on allergic sensitization of Austrian adolescents using molecule-based IgE profiling. *Allergy* 2017. 72(5): 754-763.

Strasser L, Dang H H, Schwarz H, Asam C, Ferreira F, Horejs-Hoeck J, Huber C G. Unbiased Quantitative Proteomics Reveals a Crucial Role of the Allergen Context for the Activation of Human Dendritic Cells. *Sci Rep* 2017. 7(1): 16638.

Streubel M K, Bischof J, Weiss R, Duschl J, Liedl W, Wimmer H, Breitenbach M, Weber M, Geltinger F, Richter K, Rinnerthaler M. Behead and live long or the tale of cathepsin L. *Yeast* 2017.

Tegtmeyer N, Wessler S, Necchi V, Rohde M, Harrer A, Rau T T, Asche C I, Boehm M, Loessner H, Figueiredo C, Naumann M, Palmisano R, Solcia E, Ricci V, Backert S. *Helicobacter pylori* Employs a Unique Basolateral Type IV Secretion Mechanism for CagA Delivery. *Cell Host Microbe* 2017. 22(4): 552-560 e555.

Wolf M, Aglas L, Twaroch T E, Steiner M, Huber S, Hauser M, Hofer H, Parigiani M A, Ebner C, Bohle B, Briza P, Neubauer A, Stolz F, Wallner M, Ferreira F. Endolysosomal protease susceptibility of Amb a 1 as a determinant of allergenicity. *J Allergy Clin Immunol* 2017.

July – September 2017

Ahammer L, Grutsch S, Wallner M, Ferreira F, Tollinger M. NMR resonance assignments of a hypoallergenic isoform of the major birch pollen allergen Bet v 1. *Biomol NMR Assign.* 2017.

Amin RM, Elfeky SA, Verwanger T, Krammer B. Fluorescence-based CdTe nanosensor for sensitive detection of cytochrome C. *Biosens Bioelectron.* 2017, 98: 415-420.

Boraschi D, Italiani P, Palomba R, Decuzzi P, Duschl A, Fadeel B, Moghimi, SM. Nanoparticles and innate immunity: new perspectives on host defence. *Semin Immunol.* 2017.

Elsasser B, Zauner FB, Messner J, Soh WT, Dall E, Brandstetter H. Distinct Roles of Catalytic Cysteine and Histidine in the Protease and Ligase Mechanisms of Human Legumain As Revealed by DFT-Based QM/MM Simulations. *ACS Catal.* 2017, 7(9): 5585-5593.

- Feichtinger RG, Neureiter D, Skaria T, Wessler S, Cover TL, Mayr JA, Zimmermann FA, Posselt G, Sperl W, Kofler B. Oxidative Phosphorylation System in Gastric Carcinomas and Gastritis. *Oxid Med Cell Longev*. 2017, 2017: 1320241.
- Hochwallner H, Schulmeister U, Swoboda I, Focke-Tejkl M, Reininger R, Civaj V, Campana R, Thalhamer J, Scheiblhofer S, Balic N, Horak F, Ollert M, Papadopoulos NG, Quirce S, Szepefalusi Z, Herz U, van Tol EA, Spitzauer S, Valenta R. Infant milk formulas differ regarding their allergenic activity and induction of T-cell and cytokine responses. *Allergy*. 2017. 72(3): 416-424.
- Hofer H, Asam C, Hauser M, Nagl B, Laimer J, Himly M, Briza P, Ebner C, Lang R, Hawranek T, Bohle B, Lackner P, Ferreira F, Wallner M. Tackling Bet v 1 and associated food allergies with a single hybrid protein. *J Allergy Clin Immunol*. 2017. 140(2): 525-533 e510.
- Kurtaj A, Hillebrand C, Fichtinger G, Hattinger E, Lietzenmayer M, Machado Y, Scheiblhofer S, Stoecklinger A, Thalhamer T, Suessner S, Danzer M, Keplinger S, Weinberger J, Schaller S, Winkler S, Gabriel C, Thalhamer J, Weiss R. Natural protective immunity against grass pollen allergy is maintained by a diverse spectrum of response types. *J Allergy Clin Immunol*. 2017.
- Machado, Y, Duinkerken S, Hoepflinger V, Mayr M, Korotchenko E, Kurtaj A, Pablos I, Steiner M, Stoecklinger A, Lubbers J, Schmid M, Ritter U, Scheiblhofer S, Ablinger M, Wally V, Hochmann S, Raninger AM, Strunk D, van Kooyk Y, Thalhamer J, Weiss R. Synergistic effects of dendritic cell targeting and laser-microporation on enhancing epicutaneous skin vaccination efficacy. *J Control Release*. 2017. 266: 87-99.
- Marquez A, Kocsis K, Zickler G, Bourret GR, Feinle A, Husing N, Himly M, Duschl A, Berger T, Diwald O. Enzyme adsorption-induced activity changes: a quantitative study on TiO₂ model agglomerates. *J Nanobiotechnology*. 2017. 15(1): 55.
- McKenna OE, Posselt G, Briza P, Lackner P, Schmitt AO, Gadermaier G, Wessler S, Ferreira F. Multi-Approach Analysis for the Identification of Proteases within Birch Pollen. *Int J Mol Sci*. 2017. 18(7).
- Pablos I, Eichhorn S, Briza P, Asam C, Gartner U, Wolf M, Ebner C, Bohle B, Arora N, Vieths S, Ferreira F, Gadermaier G. Proteomic profiling of the weed feverfew, a neglected pollen allergen source. *Sci Rep*. 2017. 7(1): 6049.
- Pablos I, Eichhorn S, Machado Y, Briza P, Neunkirchner A, Jahn-Schmid B, Wildner S, Soh WT, Ebner C, Park JW, Pickl WF, Arora N, Vieths S, Ferreira F, Gadermaier G. Distinct epitope structures of defensin-like proteins linked to proline-rich regions give rise to differences in their allergenic activity. *Allergy*. 2017.
- Pillong M, Hiss JA, Schneider P, Lin YC, Posselt G, Pfeiffer B, Blatter M, Muller AT, Bachler S, Neuhaus CS, Dittrich PS, Altmann KH, Wessler S, Schneider G. Rational Design of Membrane-Pore-Forming Peptides. *Small* 2017.
- Piret JP, Bondarenko OM, Boyles MSP, Himly M, Ribeiro AR, Benetti F, Smal C, Lima B, Potthoff A, Simion M, Dumortier E, Leite PEC, Balottin LB, Granjeiro JM, Ivask A, Kahru A, Radauer-Preiml I, Tischler U, Duschl A, Saout C, Anguissola S, Haase A, Jacobs A, Nelissen I, Misra SK, Toussaint O. Pan-European inter-laboratory studies on a panel of in vitro cytotoxicity and pro-inflammation assays for nanoparticles. *Arch Toxicol*. 2017. 91(6): 2315-2330.
- Regl C, Wohlschlagel T, Holzmann J, Huber CG. A Generic HPLC Method for Absolute Quantification of Oxidation in Monoclonal Antibodies and Fc-Fusion Proteins Using UV and MS Detection. *Anal Chem*. 2017. 89(16): 8391-8398.

- Roschger C, Neukirchen S, Elsasser B, Schubert M, Maeding N, Verwanger T, Krammer B, Cabrele C. Targeting of a Helix-Loop-Helix Transcriptional Regulator by a Short Helical Peptide. *ChemMedChem*. 2017 12(18): 1497-1503.
- Ruggenthaler M, Grass J, Schuh W, Huber CG, Reischl RJ. Levothyroxine sodium revisited: A wholistic structural elucidation approach of new impurities via HPLC-HRMS/MS, on-line H/D exchange, NMR spectroscopy and chemical synthesis. *J Pharm Biomed Anal*. 2017. 135: 140-152.
- Schonauer E, Kany AM, Haupenthal J, Husecken K, Hoppe IJ, Voos K, Yahiaoui S, Elsasser B, Ducho C, Brandstetter H, Hartmann RW. Discovery of a Potent Inhibitor Class with High Selectivity toward Clostridial Collagenases. *J Am Chem Soc*. 2017. 139(36): 12696-12703.
- Stemeseder T, Freier R, Wildner S, Fuchs JE, Briza P, Lang R, Batanero E, Lidholm J, Liedl KR, Campo P, Hawranek T, Villalba M, Brandstetter H, Ferreira, F, Gadermaier G. Crystal structure of Pla I 1 reveals both structural similarity and allergenic divergence within the Ole e 1-like protein family. *J Allergy Clin Immunol*. 2017. 140(1): 277-280.
- Strandt H, Pinheiro DF, Kaplan DH, Wirth D, Gratz I K, Hammerl P, Thalhamer J, Stoecklinger A. Neoantigen Expression in Steady-State Langerhans Cells Induces CTL Tolerance. *J Immunol*. 2017. 199(5): 1626-1634.
- Stutz K, Muller AT, Hiss JA, Schneider P, Blatter M, Pfeiffer B, Posselt G, Kanfer G, Kornmann B, Wrede P, Altmann KH, Wessler S, Schneider G. Peptide-Membrane Interaction between Targeting and Lysis. *ACS Chem Biol*. 2017. 12(9): 2254-2259.
- Wildner S, Elsasser B, Stemeseder T, Briza P, Soh WT, Villalba M, Lidholm J, Brandstetter H, Gadermaier G. Endolysosomal Degradation of Allergenic Ole e 1-Like Proteins: Analysis of Proteolytic Cleavage Sites Revealing T Cell Epitope-Containing Peptides. *Int J Mol Sci*. 2017. 18(8).
- Zulehner N, Nagl B, Briza P, Roulias A, Ballmer-Weber B, Zlabinger GJ, Ferreira F, Bohle B. Characterization of the T-cell response to Dau c 1, the Bet v 1-homolog in carrot. *Allergy*. 2017. 72(2): 244-251.

April – June 2017

- Bischof J, Salzmann M, Streubel MK, Hasek J, Geltinger F, Duschl J, Bresgen N, Briza P, Haskova D, Lejskova R, Sopjani M, Richter K, Rinnerthaler M. Clearing the outer mitochondrial membrane from harmful proteins via lipid droplets. *Cell Death Discov* 2017; 3:17016.
- Carreras-Torres R, Johansson M, Haycock PC, Wade KH, Relton CL, Martin RM, Davey Smith G, Albanes D, Aldrich MC, Andrew A, Arnold SM, Bickeboller H, Bojesen SE, Brunnstrom H, Manjer J, Bruske I, Caporaso NE, Chen C, Christiani DC, Christian WJ, Doherty JA, Duell EJ, Field JK, Davies MPA, Marcus MW, Goodman GE, Grankvist K, Haugen A, Hong YC, Kiemeny LA, van der Heijden E, Kraft P, Johansson MB, Lam S, Landi MT, Lazarus P, Le Marchand L, Liu G, Melander O, Park SL, Rennert G, Risch A, Haura EB, Scelo G, Zaridze D, Mukeriya A, Savic M, Lissowska J, Swiatkowska B, Janout V, Holcatova I, Mates D, Schabath MB, Shen H, Tardon A, Teare MD, Woll P, Tsao MS, Wu X, Yuan JM, Hung RJ, Amos CI, McKay J, Brennan P. Obesity, metabolic factors and risk of different histological types of lung cancer: A Mendelian randomization study. *PLoS one* 2017; 12(6):e0177875.

- Dukorn S, Littmann T, Keller M, Kuhn K, Cabrele C, Baumeister P, Bernhardt G, Buschauer A. Fluorescence- and Radiolabeling of [Lys4,Nle17,30]hPP Yields Molecular Tools for the NPY Y4 Receptor. *Bioconjug Chem* 2017; 28(4):1291-304.
- Feng Y, Wang Y, Liu H, Liu Z, Mills C, Han Y, Hung RJ, Brhane Y, McLaughlin J, Brennan P, Bickeboeller H, Rosenberger A, Houlston RS, Caporaso NE, Teresa Landi M, Brueske I, Risch A, Ye Y, Wu X, Christiani DC, Amos CI, Wei Q. Genetic variants of PTPN2 are associated with lung cancer risk: a re-analysis of eight GWASs in the TRICL-ILCCO consortium. *Scientific reports* 2017; 7(1):825.
- Frijns E, Verstraelen S, Stoehr LC, Van Laer J, Jacobs A, Peters J, Tirez K, Boyles MSP, Geppert M, Madl P, Nelissen I, Duschl A, Himly M. A Novel Exposure System Termed NAVETTA for In Vitro Laminar Flow Electrodeposition of Nanoaerosol and Evaluation of Immune Effects in Human Lung Reporter Cells. *Environmental science & technology* 2017; 51(9):5259-69.
- Gobl C, Focke-Tejkl M, Najafi N, Schrank E, Madl T, Kosol S, Madritsch C, Dorofeeva Y, Flicker S, Thalhamer J, Valenta R, Zangger K, Tjandra N. Flexible IgE epitope-containing domains of Phl p 5 cause high allergenic activity. *The Journal of allergy and clinical immunology* 2017.
- Haider C, Ferk F, Bojaxhi E, Martano G, Stutz H, Bresgen N, Knasmuller S, Alija A, Eckl PM. Effects of beta-Carotene and Its Cleavage Products in Primary Pneumocyte Type II Cells. *Antioxidants (Basel)* 2017; 6(2).
- Himly M, Mills-Goodlet R, Geppert M, Duschl A. Nanomaterials in the Context of Type 2 Immune Responses-Fears and Potentials. *Front Immunol* 2017; 8:471.
- Hofer H, Weidinger T, Briza P, Asam C, Wolf M, Twaroch TE, Stolz F, Neubauer A, Dall E, Hammerl P, Jacquet A, Wallner M. Comparing Proteolytic Fingerprints of Antigen-Presenting Cells during Allergen Processing. *Int J Mol Sci* 2017; 18(6).
- Hollbacher B, Schmitt AO, Hofer H, Ferreira F, Lackner P. Identification of Proteases and Protease Inhibitors in Allergenic and Non-Allergenic Pollen. *Int J Mol Sci* 2017; 18(6).
- Kitzmuller C, Kalser J, Mutschlechner S, Hauser M, Zlabinger GJ, Ferreira F, Bohle B. Fusion proteins of flagellin and the major birch pollen allergen Bet v 1 show enhanced immunogenicity, reduced allergenicity, and intrinsic adjuvanticity. *The Journal of allergy and clinical immunology* 2017.
- Lee M, Neukirchen S, Cabrele C, Reiser O. Visible-light photoredox-catalyzed desulfurization of thiol- and disulfide-containing amino acids and small peptides. *J Pept Sci* 2017.
- Liu H, Liu Z, Wang Y, Stinchcombe TE, Owzar K, Han Y, Hung RJ, Brhane Y, McLaughlin J, Brennan P, Bickeboeller H, Rosenberger A, Houlston RS, Caporaso N, Landi MT, Bruske I, Risch A, Wu X, Ye Y, Christiani DC, Amos CI, Wei Q. Transdisciplinary Research in Cancer of the Lung Research T. Functional variants in DCAF4 associated with lung cancer risk in European populations. *Carcinogenesis* 2017; 38(5):541-51.
- McKay JD, Hung RJ, Han Y, Zong X, Carreras-Torres R, Christiani DC, Caporaso NE, Johansson M, Xiao X, Li Y, Byun J, Dunning A, Pooley KA, Qian DC, Ji X, Liu G, Timofeeva MN, Bojesen SE, Wu X, Le Marchand L, Albanes D, Bickeboeller H, Aldrich MC, Bush WS, Tardon A, Rennert G, Teare MD, Field JK, Kiemeny LA, Lazarus P, Haugen A, Lam S, Schabath MB, Andrew AS, Shen H, Hong YC, Yuan JM, Bertazzi PA, Pesatori AC, Ye Y, Diao N, Su L, Zhang R, Brhane Y, Leighl N, Johansen JS, Møller H, Saliba W, Haiman CA, Wilkens LR, Fernandez-Somoano A, Fernandez-Tardon G, van der Heijden HFM, Kim JH, Dai J, Hu Z, Davies MPA, Marcus MW, Brunnstrom H, Manjer J, Melander O, Muller DC, Overvad K, Trichopoulou A, Tumino R, Doherty JA, Barnett MP, Chen C, Goodman GE, Cox A, Taylor F, Woll P, Bruske I, Wichmann HE, Manz J, Muley TR, Risch A, Rosenberger A, Grankvist K, Johansson M, Shepherd FA, Tsao MS, Arnold SM, Haura EB, Bolca C, Holcatova I, Janout V, Kontic M, Lissowska J, Mukeria A, Ognjanovic S, Orlowski TM, Scelo

- G, Swiatkowska B, Zaridze D, Bakke P, Skaug V, Zienolddiny S, Duell EJ, Butler LM, Koh WP, Gao YT, Houlston RS, McLaughlin J, Stevens VL, Joubert P, Lamontagne M, Nickle DC, Obeidat M, Timens W, Zhu B, Song L, Kachuri L, Artigas MS, Tobin MD, Wain LV, SpiroMeta C, Rafnar T, Thorgeirsson TE, Reginsson GW, Stefansson K, Hancock DB, Bierut LJ, Spitz MR, Gaddis NC, Lutz SM, Gu F, Johnson EO, Kamal A, Pikielny C, Zhu D, Lindstroem S, Jiang X, Tyndale RF, Chenevix-Trench G, Beesley J, Bosse Y, Chanock S, Brennan P, Landi MT, Amos CI. Large-scale association analysis identifies new lung cancer susceptibility loci and heterogeneity in genetic susceptibility across histological subtypes. *Nat Genet* 2017; 49(7):1126-32.
- Neuper T, Ellwanger K, Schwarz H, Kufer TA, Duschl A, Horejs-Hoeck J. NOD1 modulates IL-10 signalling in human dendritic cells. *Scientific reports* 2017; 7(1):1005.
- Posselt G, Crabtree JE, Wessler S. Proteolysis in Helicobacter pylori-Induced Gastric Cancer. *Toxins (Basel)* 2017; 9(4).
- Reinmuth-Selzle K, Kampf CJ, Lucas K, Lang-Yona N, Frohlich-Nowoisky J, Shiraiwa M, Lakey PSJ, Lai S, Liu F, Kunert AT, Ziegler K, Shen F, Sgarbanti R, Weber B, Bellinghausen I, Saloga J, Weller MG, Duschl A, Schuppan D, Poschl U. Air Pollution and Climate Change Effects on Allergies in the Anthropocene: Abundance, Interaction, and Modification of Allergens and Adjuvants. *Environmental science & technology* 2017; 51(8):4119-41.
- Ruggenthaler M, Grass J, Schuh W, Huber CG, Reischl RJ. Impurity profiling of liothyronine sodium by means of reversed phase HPLC, high resolution mass spectrometry, on-line H/D exchange and UV/Vis absorption. *J Pharm Biomed Anal* 2017; 143:147-58.
- Schubert M, Aeschbacher T, Zierke M, Smiesko M, Collot M, Mallet JM, Ernst B, Allain FH. A secondary structure element present in a wide range of fucosylated glycoepitopes. *Chemistry* 2017.
- Stemeseder T, Klinglmayr E, Moser S, Lang R, Himly M, Oostingh GJ, Zumbach J, Bathke AC, Hawranek T, Gadermaier G. Influence of Intrinsic and Lifestyle Factors on the Development of IgE Sensitization. *Int Arch Allergy Immunol* 2017; 173(2):99-104.
- Wessler S, Aberger F, Hartmann TN. The sound of tumor cell-microenvironment communication - composed by the Cancer Cluster Salzburg research network. *Cell Commun Signal* 2017; 15(1):20.
- Wessler S, Krisch LM, Elmer DP, Aberger F. From inflammation to gastric cancer - the importance of Hedgehog/GLI signaling in Helicobacter pylori-induced chronic inflammatory and neoplastic diseases. *Cell Commun Signal* 2017; 15(1):15.
- Wolf M, Twaroch TE, Huber S, Reithofer M, Steiner M, Aglas L, Hauser M, Aloisi I, Asam C, Hofer H, Parigiani MA, Ebner C, Bohle B, Briza P, Angela N, Stolz F, Jahn-Schmid B, Wallner M, Ferreira F. Amb a 1 isoforms: unequal siblings with distinct immunological features. *Allergy* 2017.

December – March 2017

- Aberger F, Hutterer E, Sternberg C, Del Burgo PJ, Hartmann TN. Acute myeloid leukemia - strategies and challenges for targeting oncogenic Hedgehog/GLI signaling. *Cell Commun Signal* 2017; 15(1):8.
- Backert S, Schmidt TP, Harrer A, Wessler S. Exploiting the Gastric Epithelial Barrier: Helicobacter pylori's Attack on Tight and Adherens Junctions. *Curr Top Microbiol Immunol* 2017; 400:195-226.

- Braga SF, Martins LC, da Silva EB, Sales Junior PA, Murta SM, Romanha AJ, Soh WT, Brandstetter H, Ferreira RS, de Oliveira RB. Synthesis and biological evaluation of potential inhibitors of the cysteine proteases cruzain and rhodesain designed by molecular simplification. *Bioorg Med Chem* 2017; 25(6):1889-900.
- da Luz CM, Boyles MS, Falagan-Lotsch P, Pereira MR, Tutumi HR, de Oliveira Santos E, Martins NB, Himly M, Sommer A, Foissner I, Duschl A, Granjeiro JM, Leite PE. Poly-lactic acid nanoparticles (PLA-NP) promote physiological modifications in lung epithelial cells and are internalized by clathrin-coated pits and lipid rafts. *Journal of nanobiotechnology* 2017; 15(1):11.
- Grafetstatter C, Gaisberger M, Prosegger J, Ritter M, Kolarz P, Pichler C, Thalhamer J, Hartl A. Does waterfall aerosol influence mucosal immunity and chronic stress? A randomized controlled clinical trial. *J Physiol Anthropol* 2017; 36(1):10.
- Gruber W, Scheidt T, Aberger F, Huber CG. Understanding cell signaling in cancer stem cells for targeted therapy - can phosphoproteomics help to reveal the secrets? *Cell Commun Signal* 2017; 15(1):12.
- Marquez A, Berger T, Feinle A, Husing N, Himly M, Duschl A, Diwald O. Bovine Serum Albumin Adsorption on TiO₂ Colloids: The Effect of Particle Agglomeration and Surface Composition. *Langmuir* 2017; 33(10):2551-8.
- Neukirchen S, Krieger V, Roschger C, Schubert M, Elsasser B, Cabrele C. Impact of the amino acid sequence on the conformation of side chain lactam-bridged octapeptides. *J Pept Sci* 2017.
- Pan Y, Liu H, Wang Y, Kang X, Liu Z, Owzar K, Han Y, Su L, Wei Y, Hung RJ, Brhane Y, McLaughlin J, Brennan P, Bickeboller H, Rosenberger A, Houlston RS, Caporaso N, Teresa Landi M, Heinrich J, Risch A, Wu X, Ye Y, Christiani DC, Amos CI, Wei Q. Associations between genetic variants in mRNA splicing-related genes and risk of lung cancer: a pathway-based analysis from published GWASs. *Scientific reports* 2017; 7:44634.
- Roschger C, Cabrele C. The Id-protein family in developmental and cancer-associated pathways. *Cell Commun Signal* 2017; 15(1):7.
- Rosenberger A, Sohns M, Friedrichs S, Hung RJ, Fehring G, McLaughlin J, Amos CI, Brennan P, Risch A, Bruske I, Caporaso NE, Landi MT, Christiani DC, Wei Y, Bickeboller H. Gene-set meta-analysis of lung cancer identifies pathway related to systemic lupus erythematosus. *PloS one* 2017; 12(3):e0173339.
- Sancho AI, Wallner M, Hauser M, Nagl B, Himly M, Asam C, Ebner C, Jahn-Schmid B, Bohle B, Ferreira F. T Cell Epitope-Containing Domains of Ragweed Amb a 1 and Mugwort Art v 6 Modulate Immunologic Responses in Humans and Mice. *PloS one* 2017; 12(1):e0169784.
- Scheibelhofer S, Laimer J, Machado Y, Weiss R, Thalhamer J. Influence of protein fold stability on immunogenicity and its implications for vaccine design. *Expert Rev Vaccines* 2017; 1-11.
- Scheibelhofer S, Strobl A, Hoepflinger V, Thalhamer T, Steiner M, Thalhamer J, Weiss R. Skin vaccination via fractional infrared laser ablation - Optimization of laser-parameters and adjuvantation. *Vaccine* 2017; 35(14):1802-9.
- Schneider P, Muller AT, Gabernet G, Button AL, Posselt G, Wessler S, Hiss JA, Schneider G. Hybrid Network Model for "Deep Learning" of Chemical Data: Application to Antimicrobial Peptides. *Mol Inform* 2017; 36(1-2).
- Schwarz H, Gornicec J, Neuper T, Parigiani MA, Wallner M, Duschl A, Horejs-Hoeck J. Biological Activity of Masked Endotoxin. *Scientific reports* 2017; 7:44750.

- Stemeseder T, Schweidler B, Doppler P, Klinglmayr E, Moser S, Lueftenegger L, Himly M, Lang R, Zumbach J, Oostingh GJ, Hawranek T, Bathke AC, Gadermaier G. Exposure to Indoor Allergens in Different Residential Settings and Its Influence on IgE Sensitization in a Geographically Confined Austrian Cohort. *PloS one* 2017; 12(1):e0168686.
- Stock LG, Leitner M, Traxler L, Bonazza K, Leclercq L, Cottet H, Friedbacher G, Ebner A, Stutz H. Advanced portrayal of SMIL coating by allying CZE performance with in-capillary topographic and charge-related surface characterization. *Anal Chim Acta* 2017; 951:1-15.
- Toth R, Scherer D, Kelemen LE, Risch A, Hazra A, Balavarca Y, Issa JJ, Moreno V, Eeles RA, Ogino S, Wu X, Ye Y, Hung RJ, Goode EL, Ulrich CM. Genetic Variants in Epigenetic Pathways and Risks of Multiple Cancers in the GAME-ON Consortium. *Cancer Epidemiol Biomarkers Prev* 2017.
- Weiss R, Scheiblhofer S, Thalhamer J. Generation and Evaluation of Prophylactic mRNA Vaccines Against Allergy. *Methods Mol Biol* 2017; 1499:123-39.
- Wessler S, Schneider G, Backert S. Bacterial serine protease HtrA as a promising new target for antimicrobial therapy? *Cell Commun Signal* 2017; 15(1):4.
- Wolff F, Leisch M, Greil R, Risch A, Pleyer L. The double-edged sword of (re)expression of genes by hypomethylating agents: from viral mimicry to exploitation as priming agents for targeted immune checkpoint modulation. *Cell Commun Signal* 2017; 15(1):13.
- Yin J, Liu H, Liu Z, Owzar K, Han Y, Su L, Wei Y, Hung RJ, Brhane Y, McLaughlin J, Brennan P, Bickeboeller H, Rosenberger A, Houlston RS, Caporaso N, Landi MT, Heinrich J, Risch A, Christiani DC, Amos CI, Wei Q. Pathway-analysis of published genome-wide association studies of lung cancer: A potential role for the CYP4F3 locus. *Mol Carcinog* 2017.
- Zhang Z, Obianyo O, Dall E, Du Y, Fu H, Liu X, Kang SS, Song M, Yu SP, Cabrele C, Schubert M, Li X, Wang JZ, Brandstetter H, Ye K. Inhibition of delta-secretase improves cognitive functions in mouse models of Alzheimer's disease. *Nature communications* 2017; 8:14740.

October – December 2016

- Abfalter CM, Schubert M, Gotz C, Schmidt TP, Posselt G, Wessler S. HtrA-mediated E-cadherin cleavage is limited to DegP and DegQ homologs expressed by gram-negative pathogens. *Cell Commun Signal* 2016; 14(1):30.
- Amos CI, Dennis J, Wang Z, Byun J, Schumacher FR, Gayther SA, Casey G, Hunter DJ, Sellers TA, Gruber SB, Dunning AM, Michailidou K, Fachal L, Doherty K, Spurdle AB, Li Y, Xiao X, Romm J, Pugh E, Coetzee GA, Hazelett DJ, Bojesen SE, Caga-Anan C, Haiman CA, Kamal A, Luccarini C, Tessier D, Vincent D, Bacot F, Van Den Berg DJ, Nelson S, Demetriades S, Goldgar DE, Couch FJ, Forman JL, Giles GG, Conti DV, Bickeboeller H, Risch A, Waldenberger M, Bruske-Hohlfeld I, Hicks BD, Ling H, McGuffog L, Lee A, Kuchenbaecker K, Soucy P, Manj J, Cunningham JM, Butterbach K, Kote-Jarai Z, Kraft P, FitzGerald L, Lindstrom S, Adams M, McKay JD, Phelan CM, Benlloch S, Kelemen LE, Brennan P, Riggan M, O'Mara TA, Shen H, Shi Y, Thompson DJ, Goodman MT, Nielsen SF, Berchuck A, Laboissiere S, Schmit SL, Shelford T, Edlund CK, Taylor JA, Field JK, Park SK, Offit K, Thomassen M, Schmutzler R, Ottini L, Hung RJ, Marchini J, Amin Al Olama A, Peters U, Eeles RA, Seldin MF, Gillanders E, Seminara D, Antoniou AC, Pharoah PD, Chenevix-Trench

- G, Chanock SJ, Simard J, Easton DF. The OncoArray Consortium: A Network for Understanding the Genetic Architecture of Common Cancers. *Cancer Epidemiol Biomarkers Prev* 2016.
- Bacher P, Heinrich F, Stervbo U, Nienen M, Vahldieck M, Iwert C, Vogt K, Kollet J, Babel N, Sawitzki B, Schwarz C, Bereswill S, Heimesaat MM, Heine G, Gadermaier G, Asam C, Assenmacher M, Kniemeyer O, Brakhage AA, Ferreira F, Wallner M, Worm M, Scheffold A. Regulatory T Cell Specificity Directs Tolerance versus Allergy against Aeroantigens in Humans. *Cell* 2016; 167(4):1067-78 e16.
- Bauer JW, Koller J, Murauer EM, De Rosa L, Enzo E, Carulli S, Bondanza S, Recchia A, Muss W, Diem A, Mayr E, Schlager P, Gratz IK, Pellegrini G, De Luca M. Closure of a Large Chronic Wound through Transplantation of Gene-Corrected Epidermal Stem Cells. *J Invest Dermatol* 2016.
- Bleuler-Martinez S, Stutz K, Sieber R, Collot M, Mallet JM, Hengartner M, Schubert M, Varrot A, Kunzler M. Dimerization of the fungal defense lectin CCL2 is essential for its toxicity against nematodes. *Glycobiology* 2016.
- Cabrele C, Reiser O. The Modern Face of Synthetic Heterocyclic Chemistry. *J Org Chem* 2016; 81(21):10109-25.
- Goettig P. Effects of Glycosylation on the Enzymatic Activity and Mechanisms of Proteases. *Int J Mol Sci* 2016; 17(12).
- Haider M, Ji B, Haselgrubler T, Sonnleitner A, Aberger F, Hesse J. A microfluidic multiwell chip for enzyme-free detection of mRNA from few cells. *Biosens Bioelectron* 2016; 86:20-6.
- Hofer H, Asam C, Hauser M, Nagl B, Laimer J, Himly M, Briza P, Ebner C, Lang R, Hawranek T, Bohle B, Lackner P, Ferreira F, Wallner M. Tackling Bet v 1- and associated food allergies with a single hybrid protein. *The Journal of allergy and clinical immunology* 2016.
- Maeding N, Verwanger T, Krammer B. Boosting Tumor-Specific Immunity Using PDT. *Cancers (Basel)* 2016; 8(10).
- Muller AT, Kaymaz AC, Gabernet G, Posselt G, Wessler S, Hiss JA, Schneider G. Sparse Neural Network Models of Antimicrobial Peptide-Activity Relationships. *Mol Inform* 2016; 35(11-12):606-14.
- Nigro EA, Brini AT, Yenagi VA, Ferreira LM, Achatz-Straussberger G, Ambrosi A, Sanvito F, Soprana E, van Anken E, Achatz G, Siccardi AG, Vangelista L. Cutting Edge: IgE Plays an Active Role in Tumor Immunosurveillance in Mice. *J Immunol* 2016; 197(7):2583-8.
- Patel YM, Park SL, Han Y, Wilkens LR, Bickeboller H, Rosenberger A, Caporaso N, Landi MT, Bruske I, Risch A, Wei Y, Christiani DC, Brennan P, Houlston R, McKay J, McLaughlin J, Hung R, Murphy S, Stram DO, Amos C, Le Marchand L. Novel Association of Genetic Markers Affecting CYP2A6 Activity and Lung Cancer Risk. *Cancer Res* 2016; 76(19):5768-76.
- Piret JP, Bondarenko OM, Boyles MS, Himly M, Ribeiro AR, Benetti F, Smal C, Lima B, Potthoff A, Simion M, Dumortier E, Leite PE, Balottin LB, Granjeiro JM, Ivask A, Kahru A, Radauer-Preiml I, Tischler U, Duschl A, Saout C, Anguissola S, Haase A, Jacobs A, Nelissen I, Misra SK, Toussaint O. Pan-European inter-laboratory studies on a panel of in vitro cytotoxicity and pro-inflammation assays for nanoparticles. *Arch Toxicol* 2016.
- Ruggenthaler M, Grass J, Schuh W, Huber CG, Reischl RJ. Levothyroxine sodium revisited: A wholistic structural elucidation approach of new impurities via HPLC-HRMS/MS, on-line H/D exchange, NMR spectroscopy and chemical synthesis. *J Pharm Biomed Anal* 2016; 135:140-52.

- Scheiblhofer S, Machado Y, Feinle A, Thalhamer J, Husing N, Weiss R. Potential of nanoparticles for allergen-specific immunotherapy - use of silica nanoparticles as vaccination platform. *Expert Opin Drug Deliv* 2016; 13(12):1777-88.
- Stemeseder T, Freier R, Wildner S, Fuchs JE, Briza P, Lang R, Batanero E, Lidholm J, Liedl KR, Campo P, Hawranek T, Villalba M, Brandstetter H, Ferreira F, Gadermaier G. Crystal structure of Pla I 1 reveals both structural similarity and allergenic divergence within the Ole e 1-like protein family. *The Journal of allergy and clinical immunology* 2016.
- Stemeseder T, Klinglmayr E, Moser S, Lueftenegger L, Lang R, Himly M, Oostingh GJ, Zumbach J, Bathke AC, Hawranek T, Gadermaier G. Cross-sectional study on allergic sensitization of Austrian adolescents using molecule-based IgE profiling. *Allergy* 2016.
- Utsch L, Logiantara A, Wallner M, Hofer H, van Ree R, van Rijt LS. Birch pollen immunotherapy inhibits anaphylaxis to the cross-reactive apple allergen Mal d 1 in mice. *Clin Exp Allergy* 2016; 46(11):1474-83.
- Yuan H, Liu H, Liu Z, Owzar K, Han Y, Su L, Wei Y, Hung RJ, McLaughlin J, Brhane Y, Brennan P, Bickeboeller H, Rosenberger A, Houlston RS, Caporaso N, Landi MT, Heinrich J, Risch A, Christiani DC, Gumus ZH, Klein RJ, Amos CI, Wei Q. A Novel Genetic Variant in Long Non-coding RNA Gene NEXN-AS1 is Associated with Risk of Lung Cancer. *Scientific reports* 2016; 6:34234.
- Zhou F, Wang Y, Liu H, Ready N, Han Y, Hung RJ, Brhane Y, McLaughlin J, Brennan P, Bickeboeller H, Rosenberger A, Houlston RS, Caporaso N, Landi MT, Bruske I, Risch A, Ye Y, Wu X, Christiani DC, Goodman G, Chen C, Transdisciplinary Research in Cancer of the Lung Research T, Amos CI, Wei Q. Susceptibility loci of CNOT6 in the general mRNA degradation pathway and lung cancer risk-A re-analysis of eight GWASs. *Mol Carcinog* 2016.
- Zuber V, Marconett CN, Shi J, Hua X, Wheeler W, Yang C, Song L, Dale AM, Laplana M, Risch A, Witoelar A, Thompson WK, Schork AJ, Bettella F, Wang Y, Djurovic S, Zhou B, Borok Z, van der Heijden HF, de Graaf J, Swinkels D, Aben KK, McKay J, Hung RJ, Bickeboeller H, Stevens VL, Albanes D, Caporaso NE, Han Y, Wei Y, Panadero MA, Mayordomo JI, Christiani DC, Kiemeny L, Andreassen OA, Houlston R, Amos CI, Chatterjee N, Laird-Offringa IA, Mills IG, Landi MT. Pleiotropic Analysis of Lung Cancer and Blood Triglycerides. *J Natl Cancer Inst* 2016; 108(12).

July – September 2016

- Abfalter CM, Schonauer E, Ponnuraj K, Huemer M, Gadermaier G, Regl C, Briza P, Ferreira F, Huber CG, Brandstetter H, Posselt G, Wessler S. Cloning, Purification and Characterization of the Collagenase ColA Expressed by *Bacillus cereus* ATCC 14579. *PloS one* 2016; 11(9):e0162433.
- Baglietto L, Ponzi E, Haycock P, Hodge A, Bianca Assumma M, Jung CH, Chung J, Fasanelli F, Guida F, Campanella G, Chadeau-Hyam M, Grankvist K, Johansson M, Ala U, Provero P, Ming Wong E, Joo J, English DR, Kazmi N, Lund E, Faltus C, Kaaks R, Risch A, Barrdahl M, Sandanger TM, Southey MC, Giles GG, Johansson M, Vineis P, Polidoro S, Relton CL, Severi G. DNA methylation changes measured in pre-diagnostic peripheral blood samples are associated with smoking and lung cancer risk. *Int J Cancer* 2016.
- Boyles MS, Ranninger C, Reischl R, Rurik M, Tessadri R, Kohlbacher O, Duschl A, Huber CG. Copper oxide nanoparticle toxicity profiling using untargeted metabolomics. *Particle and fibre toxicology* 2016; 13(1):49.
- Chen LS, Baker T, Hung RJ, Horton A, Culverhouse R, Hartz S, Saccone N, Cheng I, Deng B, Han Y, Hansen HM, Horsman J, Kim C, Rosenberger A, Aben KK, Andrew AS, Chang SC, Saum KU, Dienemann

- H, Hatsukami DK, Johnson EO, Pande M, Wensch MR, McLaughlin J, Skaug V, van der Heijden EH, Wampfler J, Wenzlaff A, Woll P, Zienolddiny S, Bickeboller H, Brenner H, Duell EJ, Haugen A, Bruske I, Kiemeny LA, Lazarus P, Le Marchand L, Liu G, Mayordomo J, Risch A, Schwartz AG, Teare MD, Wu X, Wiencke JK, Yang P, Zhang ZF, Spitz MR, Amos CI, Bierut LJ. Genetic Risk Can Be Decreased: Quitting Smoking Decreases and Delays Lung Cancer for Smokers With High and Low CHRNA5 Risk Genotypes - A Meta-analysis. *EBioMedicine* 2016.
- Dahms SO, Creemers JW, Schaub Y, Bourenkov GP, Zogg T, Brandstetter H, Than ME. The structure of a furin-antibody complex explains non-competitive inhibition by steric exclusion of substrate conformers. *Scientific reports* 2016; 6:34303.
- Fehring G, Kraft P, Pharoah PD, Eeles RA, Chatterjee N, Schumacher FR, Schildkraut JM, Lindstrom S, Brennan P, Bickeboller H, Houlston RS, Landi MT, Caporaso N, Risch A, Amin AI Olama A, Berndt SI, Giovannucci EL, Gronberg H, Kote-Jarai Z, Ma J, Muir K, Stampfer MJ, Stevens VL, Wiklund F, Willett WC, Goode EL, Permuth JB, Risch HA, Reid BM, Bezieau S, Brenner H, Chan AT, Chang-Claude J, Hudson TJ, Kocarnik JK, Newcomb PA, Schoen RE, Slattery ML, White E, Adank MA, Ahsan H, Aittomaki K, Baglietto L, Blomquist C, Canzian F, Czene K, Dos-Santos-Silva I, Eliassen AH, Figueroa JD, Flesch-Janys D, Fletcher O, Garcia-Closas M, Gaudet MM, Johnson N, Hall P, Hazra A, Hein R, Hofman A, Hopper JL, Irwanto A, Johansson M, Kaaks R, Kibriya MG, Lichtner P, Liu J, Lund E, Makalic E, Meindl A, Muller-Myhsok B, Muranen TA, Nevanlinna H, Peeters PH, Peto J, Prentice RL, Rahman N, Sanchez MJ, Schmidt DF, Schmutzler RK, Southey MC, Tamimi R, Travis RC, Turnbull C, Uitterlinden AG, Wang Z, Whittemore AS, Yang XR, Zheng W, Buchanan DD, Casey G, Conti DV, Edlund CK, Gallinger S, Haile RW, Jenkins M, Le Marchand L, Li L, Lindor NM, Schmit SL, Thibodeau SN, Woods MO, Rafnar T, Gudmundsson J, Stacey SN, Stefansson K, Sulem P, Chen YA, Tyrer JP, Christiani DC, Wei Y, Shen H, Hu Z, Shu XO, Shiraishi K, Takahashi A, Bosse Y, Obeidat M, Nickle D, Timens W, Freedman ML, Li Q, Seminara D, Chanock SJ, Gong J, Peters U, Gruber SB, Amos CI, Sellers TA, Easton DF, Hunter DJ, Haiman CA, Henderson BE, Hung RJ, Ovarian Cancer Association C, Consortium P, Hereditary B, Ovarian Cancer Research Group N, Colorectal Transdisciplinary S, African American Breast Cancer C, African Ancestry Prostate Cancer C. Cross-Cancer Genome-Wide Analysis of Lung, Ovary, Breast, Prostate, and Colorectal Cancer Reveals Novel Pleiotropic Associations. *Cancer Res* 2016; 76(17):5103-14.
- Hochwallner H, Schulmeister U, Swoboda I, Focke-Tejkl M, Reininger R, Civaj V, Campana R, Thalhamer J, Scheiblhofer S, Balic N, Horak F, Ollert M, Papadopoulos NG, Quirce S, Szepfalusi Z, Herz U, van Tol EA, Spitzauer S, Valenta R. Infant milk formulas differ regarding their allergenic activity and induction of T-cell and cytokine responses. *Allergy* 2016.
- Khankari NK, Shu XO, Wen W, Kraft P, Lindstrom S, Peters U, Schildkraut J, Schumacher F, Bofetta P, Risch A, Bickeboller H, Amos CI, Easton D, Eeles RA, Gruber SB, Haiman CA, Hunter DJ, Chanock SJ, Pierce BL, Zheng W, Colorectal Transdisciplinary S, Discovery B, Risk of Inherited Variants in Breast C, Elucidating Loci Involved in Prostate Cancer S, Transdisciplinary Research in Cancer of the L. Association between Adult Height and Risk of Colorectal, Lung, and Prostate Cancer: Results from Meta-analyses of Prospective Studies and Mendelian Randomization Analyses. *PLoS Med* 2016; 13(9):e1002118.
- Klein B, Mrowetz H, Thalhamer J, Scheiblhofer S, Weiss R, Aigner L. Allergy Enhances Neurogenesis and Modulates Microglial Activation in the Hippocampus. *Front Cell Neurosci* 2016; 10:169.
- Krisch LM, Posselt G, Hammerl P, Wessler S. CagA Phosphorylation in *Helicobacter pylori*-Infected B Cells Is Mediated by the Nonreceptor Tyrosine Kinases of the Src and Abl Families. *Infection and immunity* 2016; 84(9):2671-80.

- Nigro EA, Brini AT, Yenagi VA, Ferreira LM, Achatz-Straussberger G, Ambrosi A, Sanvito F, Soprana E, van Anken E, Achatz G, Siccardi AG, Vangelista L. Cutting Edge: IgE Plays an Active Role in Tumor Immunosurveillance in Mice. *J Immunol* 2016; 197(7):2583-8.
- Patel YM, Park SL, Han Y, Wilkens LR, Bickeboller H, Rosenberger A, Caporaso N, Landi MT, Bruske I, Risch A, Wei Y, Christiani DC, Brennan P, Houlston R, McKay J, McLaughlin J, Hung R, Murphy S, Stram DO, Amos C, Le Marchand L. Novel Association of Genetic Markers Affecting CYP2A6 Activity and Lung Cancer Risk. *Cancer Res* 2016.
- Pertl-Obermeyer H, Wu XN, Schrodtt J, Mudsam C, Obermeyer G, Schulze WX. Identification of Cargo for Adaptor Protein (AP) Complexes 3 and 4 by Sucrose Gradient Profiling. *Mol Cell Proteomics* 2016; 15(9):2877-89.
- Steiner M, Harrer A, Himly M. Basophil Reactivity as Biomarker in Immediate Drug Hypersensitivity Reactions-Potential and Limitations. *Front Pharmacol* 2016; 7:171.
- Utsch L, Logiantara A. Susceptibility loci of CNOT6, Wallner M, Hofer H, van Ree R, van Rijt LS. Birch pollen immunotherapy inhibits anaphylaxis to the cross-reactive apple allergen Mal d 1 in mice. *Clin Exp Allergy* 2016.
- Zuber V, Marconett CN, Shi J, Hua X, Wheeler W, Yang C, Song L, Dale AM, Laplana M, Risch A, Witoelar A, Thompson WK, Schork AJ, Bettella F, Wang Y, Djurovic S, Zhou B, Borok Z, van der Heijden HF, de Graaf J, Swinkels D, Aben KK, McKay J, Hung RJ, Bickeboller H, Stevens VL, Albanes D, Caporaso NE, Han Y, Wei Y, Panadero MA, Mayordomo JI, Christiani DC, Kiemeny L, Andreassen OA, Houlston R, Amos CI, Chatterjee N, Laird-Offringa IA, Mills IG, Landi MT. Pleiotropic Analysis of Lung Cancer and Blood Triglycerides. *J Natl Cancer Inst* 2016; 108(12).

April – June 2016

- Amin RM, Elfeky SA, Verwanger T, Krammer B. A new biocompatible nanocomposite as a promising constituent of sunscreens. *Mater Sci Eng C Mater Biol Appl* 2016; 63:46-51.
- Behmuller R, Kavkova E, Duh S, Huber CG, Tenhaken R. The role of arabinokinase in arabinose toxicity in plants. *Plant J* 2016.
- Grafetstatter C, Proseger J, Braunschmid H, Sanovic R, Hahne P, Pichler C, Thalhamer J, Hartl A. No Concentration Decrease of House Dust Mite Allergens With Rising Altitude in Alpine Regions. *Allergy Asthma Immunol Res* 2016; 8(4):312-8.
- Gruber W, Hutzinger M, Elmer DP, Parigger T, Sternberg C, Cegielski L, Zaja M, Leban J, Michel S, Hamm S, Vitt D, Aberger F. DYRK1B as therapeutic target in Hedgehog/GLI-dependent cancer cells with Smoothed inhibitor resistance. *Oncotarget* 2016; 7(6):7134-48.
- Haider M, Ji B, Haselgrubler T, Sonnleitner A, Aberger F, Hesse J. A microfluidic multiwell chip for enzyme-free detection of mRNA from few cells. *Biosens Bioelectron* 2016; 86:20-6.
- Helander L, Sharma A, Krokan HE, Plaetzer K, Krammer B, Tortik N, Gederaas OA, Slupphaug G, Hagen L. Photodynamic treatment with hexyl-aminolevulinat mediat reversible thiol oxidation in core oxidative stress signaling proteins. *Mol Biosyst* 2016; 12(3):796-805.
- Kristensen LH, Olsen OH, Blouse GE, Brandstetter H. Releasing the brakes in coagulation Factor IXa by cooperative maturation of the substrate binding site. *Biochem J* 2016.

- Leitner M, Stock LG, Traxler L, Leclercq L, Bonazza K, Friedbacher G, Cottet H, Stutz H, Ebner A. Mapping molecular adhesion sites inside SMIL coated capillaries using atomic force microscopy recognition imaging. *Anal Chim Acta* 2016; 930:39-48.
- Matricardi PM, Kleine-Tebbe J, Hoffmann HJ, Valenta R, Hilger C, Hofmaier S, Aalberse RC, Agache I, Asero R, Ballmer-Weber B, Barber D, Beyer K, Biedermann T, Bilo MB, Blank S, Bohle B, Bosshard PP, Breiteneder H, Brough HA, Caraballo L, Caubet JC, Cramer R, Davies JM, Douladiris N, Ebisawa M, PA EI, Fernandez-Rivas M, Ferreira F, Gadermaier G, Glatz M, Hamilton RG, Hawranek T, Hellings P, Hoffmann-Sommergruber K, Jakob T, Jappe U, Jutel M, Kamath SD, Knol EF, Korosec P, Kuehn A, Lack G, Lopata AL, Makela M, Morisset M, Niederberger V, Nowak-Wegrzyn AH, Papadopoulos NG, Pastorello EA, Pauli G, Platts-Mills T, Posa D, Poulsen LK, Raulf M, Sastre J, Scala E, Schmid JM, Schmid-Grendelmeier P, van Hage M, van Ree R, Vieths S, Weber R, Wickman M, Muraro A, Ollert M. EAACI Molecular Allergology User's Guide. *Pediatr Allergy Immunol* 2016; 27 Suppl 23:1-250.
- McKenna OE, Asam C, G RA, Roulias A, Goulart LR, Ferreira F. How relevant is panallergen sensitisation in the development of allergies? *Pediatr Allergy Immunol* 2016.
- Nivarthi H, Gordziel C, Themanns M, Kramer N, Eberl M, Rabe B, Schleder M, Rose-John S, Knosel T, Kenner L, Freund P, Aberger F, Han X, Kralovics R, Dolznig H, Jennek S, Friedrich K, Moriggl R. The ratio of STAT1 to STAT3 expression is a determinant of colorectal cancer growth. *Oncotarget* 2016.
- Pröpster JM, Yang F, Rabbani S, Ernst B, Allain FH-T, Schubert M. Structural basis for sulfation-dependent self-glycan recognition by the human immune-inhibitory receptor Siglec-8. *Proceedings of the National Academy of Sciences* 2016.
- Ranninger C, Schmidt LE, Rurik M, Limonciel A, Jennings P, Kohlbacher O, Huber CG. Improving global feature detectabilities through scan range splitting for untargeted metabolomics by high-performance liquid chromatography-Orbitrap mass spectrometry. *Anal Chim Acta* 2016; 930:13-22.
- Schafer S, Salcher S, Seiter M, Ranninger C, Most M, Obexer P, Huber CG, Ausserlechner MJ, Schwaiger S, Stuppner H. Characterization of the XIAP-Inhibiting Proanthocyanidin Fraction of the Aerial Parts of *Ephedra sinica*. *Planta Med* 2016.
- Scheibelhofer S, Machado Y, Feinle A, Thalhamer J, Husing N, Weiss R. Potential of nanoparticles for allergen-specific immunotherapy - use of silica nanoparticles as vaccination platform. *Expert Opin Drug Deliv* 2016.
- Schmidt TP, Goetz C, Huemer M, Schneider G, Wessler S. Calcium binding protects E-cadherin from cleavage by *Helicobacter pylori* HtrA. *Gut Pathog* 2016; 8:29.
- Zulehner N, Nagl B, Briza P, Roulias A, Ballmer-Weber B, Zlabinger GJ, Ferreira F, Bohle B. Characterization of the T cell response to Dau c 1, the Bet v 1-homolog in carrot. *Allergy* 2016.

January – March 2016

- da Silva ES, Pinheiro CS, Quintella CM, Ferreira F, LG CP, Alcantara-Neves NM. Advances in patent applications related to allergen immunotherapy. *Expert Opin Ther Pat* 2016.
- Goodman RE, Ebisawa M, Ferreira F, Sampson HA, van Ree R, Vieths S, Baumert JL, Bohle B, Lalithambika S, Wise J, Taylor SL. AllergenOnline: A peer-reviewed, curated allergen database to assess novel food proteins for potential cross-reactivity. *Mol Nutr Food Res* 2016.

- Gruber W, Hutzinger M, Elmer DP, Parigger T, Sternberg C, Cegielkowski L, Zaja M, Leban J, Michel S, Hamm S, Vitt D, Aberger F. DYRK1B as therapeutic target in Hedgehog/GLI-dependent cancer cells with Smoothed inhibitor resistance. *Oncotarget* 2016; 7(6):7134-48.
- Haider M, Haselgrübler T, Sonnleitner A, Aberger F, Hesse J. A Double-Hybridization Approach for the Transcription- and Amplification-Free Detection of Specific mRNA on a Microarray. *Microarrays* 2016; 5.
- Helander L, Sharma A, Krokan HE, Plaetzer K, Krammer B, Tortik N, Gederaas OA, Slupphaug G, Hagen L. Photodynamic treatment with hexyl-aminolevulinate mediates reversible thiol oxidation in core oxidative stress signaling proteins. *Mol Biosyst* 2016; 12(3):796-805.
- Jung S, Fischer J, Spudy B, Kerkow T, Sonnichsen FD, Xue L, Bonvin AM, Goettig P, Magdolen V, Meyer-Hoffert U, Grotzinger J. The solution structure of the kallikrein-related peptidases inhibitor SPINK6. *Biochem Biophys Res Commun* 2016; 471(1):103-8.
- Kang X, Liu H, Onaitis MW, Liu Z, Owzar K, Han Y, Su L, Wei Y, Hung RJ, Brhane Y, McLaughlin J, Brennan P, Bickeboller H, Rosenberger A, Houlston RS, Caporaso N, Landi MT, Heinrich J, Risch A, Wu X, Ye Y, Christiani DC, Amos CI, Wei Q, Transdisciplinary Research in Cancer of the Lung Research T. Polymorphisms of the centrosomal gene (FGFR1OP) and lung cancer risk: a meta-analysis of 14 463 cases and 44 188 controls. *Carcinogenesis* 2016; 37(3):280-9.
- Keller M, Kuhn KK, Einsiedel J, Hubner H, Biselli S, Mollereau C, Wifling D, Svobodova J, Bernhardt G, Cabrele C, Vanderheyden PM, Gmeiner P, Buschauer A. Mimicking of Arginine by Functionalized N(omega)-Carbamoylated Arginine As a New Broadly Applicable Approach to Labeled Bioactive Peptides: High Affinity Angiotensin, Neuropeptide Y, Neuropeptide FF, and Neurotensin Receptor Ligands As Examples. *J Med Chem* 2016; 59(5):1925-45.
- Krenn PW, Hofbauer SW, Pucher S, Hutterer E, Hinterseer E, Denk U, Asslaber D, Ganghammer S, Sternberg C, Neureiter D, Aberger F, Wickstrom SA, Egle A, Greil R, Hartmann TN. ILK induction in lymphoid organs by a TNFalpha-NF-kappaB-regulated pathway promotes the development of chronic lymphocytic leukemia. *Cancer Res* 2016.
- Laimer J, Hiebl-Flach J, Lengauer D, Lackner P. MAESTROweb: a web server for structure-based protein stability prediction. *Bioinformatics* 2016.
- Moraes AH, Asam C, Batista A, Almeida FC, Wallner M, Ferreira F, Valente AP. (1)H, (13)C and (15)N resonance assignments and second structure information of Fag s 1: Fagales allergen from *Fagus sylvatica*. *Biomol NMR Assign* 2016; 10(1):45-8.
- Pablos I, Wildner S, Asam C, Wallner M, Gadermaier G. Pollen Allergens for Molecular Diagnosis. *Curr Allergy Asthma Rep* 2016; 16(4):31.
- Radauer-Preiml I, Andosch A, Hawranek T, Luetz-Meindl U, Wiederstein M, Horejs-Hoeck J, Himly M, Boyles M, Duschl A. Nanoparticle-allergen interactions mediate human allergic responses: protein corona characterization and cellular responses. *Particle and fibre toxicology* 2016; 13(1):3.
- Schmidt TP, Perna AM, Fugmann T, Bohm M, Jan H, Haller S, Gotz C, Tegtmeyer N, Hoy B, Rau TT, Neri D, Backert S, Schneider G, Wessler S. Identification of E-cadherin signature motifs functioning as cleavage sites for *Helicobacter pylori* HtrA. *Scientific reports* 2016; 6:23264.

Steiner M, Hawranek T, Schneider M, Ferreira F, Horejs-Hoeck J, Harrer A, Himly M. Elevated Toll-Like Receptor-Induced CXCL8 Secretion in Human Blood Basophils from Allergic Donors Is Independent of Toll-Like Receptor Expression Levels. *PloS one* 2016; 11(2):e0149275.

Westernberg L, Schulten V, Greenbaum JA, Natali S, Tripple V, McKinney DM, Frazier A, Hofer H, Wallner M, Sallusto F, Sette A, Peters B. T-cell epitope conservation across allergen species is a major determinant of immunogenicity. *The Journal of allergy and clinical immunology* 2016.

October - December 2015

Boyles, M. S., T. Kristl, A. Andosch, M. Zimmermann, N. Tran, E. Casals, M. Himly, V. Puentes, C. G. Huber, U. Lutz-Meindl and A. Duschl. "Chitosan Functionalisation of Gold Nanoparticles Encourages Particle Uptake and Induces Cytotoxicity and Pro-Inflammatory Conditions in Phagocytic Cells, as Well as Enhancing Particle Interactions with Serum Components." *J Nanobiotechnology* 13, (2015): 84.

Espada, R., R. G. Parra, M. J. Sippl, T. Mora, A. M. Walczak and D. U. Ferreira. "Repeat Proteins Challenge the Concept of Structural Domains." *Biochem Soc Trans* 43, no. 5 (2015): 844-9.

Fasanelli, F., L. Baglietto, E. Ponzi, F. Guida, G. Campanella, M. Johansson, K. Grankvist, M. Johansson, M. B. Assumma, A. Naccarati, M. Chadeau-Hyam, U. Ala, C. Faltus, R. Kaaks, A. Risch, B. De Stavola, A. Hodge, G. G. Giles, M. C. Southey, C. L. Relton, P. C. Haycock, E. Lund, S. Polidoro, T. M. Sandanger, G. Severi and P. Vineis. "Hypomethylation of Smoking-Related Genes Is Associated with Future Lung Cancer in Four Prospective Cohorts." *Nat Commun* 6, (2015): 10192.

Guo, S., W. Skala, V. Magdolen, P. Briza, M. L. Biniossek, O. Schilling, J. Kellermann, H. Brandstetter and P. Goettig. "A Single Glycan at the 99-Loop of Human Kallikrein-Related Peptidase 2 Regulates Activation and Enzymatic Activity." *J Biol Chem*, (2015).

Hattinger, E., S. Scheiblhofer, E. Roesler, T. Thalhamer, J. Thalhamer and R. Weiss. "Prophylactic Mrna Vaccination against Allergy Confers Long-Term Memory Responses and Persistent Protection in Mice." *J Immunol Res* 2015, (2015): 797421.

Himly, M., A. Nandy, H. Kahlert, M. Thilker, M. Steiner, P. Briza, N. Angela, S. Klysner, R. van Ree, K. H. Buchheit, S. Vieths and F. Ferreira. "Standardization of Allergen Products: 2. Detailed Characterization of Gmp-Produced Recombinant Phl P 5.0109 as European Pharmacopoeia Reference Standard." *Allergy*, (2015).

Machado, Y., R. Freier, S. Scheiblhofer, T. Thalhamer, M. Mayr, P. Briza, S. Grutsch, L. Ahammer, J. E. Fuchs, H. G. Wallnoefer, A. Isakovic, V. Kohlbauer, A. Hinterholzer, M. Steiner, M. Danzer, J. Horejs-Hoeck, F. Ferreira, K. R. Liedl, M. Tollinger, P. Lackner, C. M. Johnson, H. Brandstetter, J. Thalhamer and R. Weiss. "Fold Stability During Endolysosomal Acidification Is a Key Factor for Allergenicity and Immunogenicity of the Major Birch Pollen Allergen." *J Allergy Clin Immunol*, (2015).

Rosenberger, A., S. Friedrichs, C. I. Amos, P. Brennan, G. Fehring, J. Heinrich, R. J. Hung, T. Muley, M. Muller-Nurasyid, A. Risch and H. Bickeboller. "Meta-Gsa: Combining Findings from Gene-Set Analyses across Several Genome-Wide Association Studies." *PLoS One* 10, no. 10 (2015): e0140179.

Scharschmidt, T. C., K. S. Vasquez, H. A. Truong, S. V. Gearty, M. L. Pauli, A. Nosbaum, I. K. Gratz, M. Otto, J. J. Moon, J. Liese, A. K. Abbas, M. A. Fischbach and M. D. Rosenblum. "A Wave of

Regulatory T Cells into Neonatal Skin Mediates Tolerance to Commensal Microbes." *Immunity* 43, no. 5 (2015): 1011-21.

Tegtmeyer, N., Y. Moodley, Y. Yamaoka, S. R. Pernitzsch, V. Schmidt, F. R. Traverso, T. P. Schmidt, R. Rad, K. G. Yeoh, H. Bow, J. Torres, M. Gerhard, G. Schneider, S. Wessler and S. Backert. "Characterization of Worldwide Helicobacter Pylori Strains Reveals Genetic Conservation and Essentiality of Serine Protease Htra." *Mol Microbiol*, (2015).

Weinberger, J., R. Jimenez-Heredia, S. Schaller, S. Suessner, J. Sunzenauer, R. Reindl-Schwaighofer, R. Weiss, S. Winkler, C. Gabriel, M. Danzer and R. Oberbauer. "Immune Repertoire Profiling Reveals That Clonally Expanded B and T Cells Infiltrating Diseased Human Kidneys Can Also Be Tracked in Blood." *PLoS One* 10, no. 11 (2015): e0143125.

Woodfolk, J. A., J. Glesner, P. W. Wright, C. L. Kepley, M. Li, M. Himly, L. M. Muehling, A. Gustchina, A. Wlodawer, M. D. Chapman and A. Pomes. "Antigenic Determinants of the Bilobal Cockroach Allergen Bla G 2." *J Biol Chem*, (2015).

July - September 2015

Asam, C., H. Hofer, M. Wolf, L. Aglas and M. Wallner. "Tree Pollen Allergens-an Update from a Molecular Perspective." *Allergy* 70, no. 10 (2015): 1201-11.

Dall, E. and H. Brandstetter. "Structure and Function of Legumain in Health and Disease." *Biochimie*, (2015).

Forstenlehner, I. C., J. Holzmann, H. Toll and C. G. Huber. "Site-Specific Characterization and Absolute Quantification of Pegfilgrastim Oxidation by Top-Down High-Performance Liquid Chromatography-Mass Spectrometry." *Anal Chem* 87, no. 18 (2015): 9336-43.

Freier, R., E. Dall and H. Brandstetter. "Protease Recognition Sites in Bet V 1a Are Cryptic, Explaining Its Slow Processing Relevant to Its Allergenicity." *Sci Rep* 5, (2015): 12707.

Huk, A., E. Izak-Nau, N. El Yamani, H. Uggerud, M. Vadset, B. Zasonska, A. Duschl and M. Dusinska. "Impact of Nanosilver on Various DNA Lesions and Hprt Gene Mutations - Effects of Charge and Surface Coating." *Part Fibre Toxicol* 12, (2015): 25.

Maier, E., M. Mittermeir, S. Ess, T. Neuper, A. Schmiedlechner, A. Duschl and J. Horejs-Hoeck. "Prerequisites for Functional Interleukin 31 Signaling and Its Feedback Regulation by Suppressor of Cytokine Signaling 3 (Socs3)." *J Biol Chem*, (2015).

Oeder, S., F. Alessandrini, O. F. Wirz, A. Braun, M. Wimmer, U. Frank, M. Hauser, J. Durner, F. Ferreira, D. Ernst, M. Mempel, S. Gilles, J. T. Buters, H. Behrendt, C. Traidl-Hoffmann, C. Schmidt-Weber, M. Akdis and J. Gutermuth. "Pollen-Derived Nonallergenic Substances Enhance Th2-Induced IgE Production in B Cells." *Allergy*, (2015).

Pencik, J., M. Schleiderer, W. Gruber, C. Unger, S. M. Walker, A. Chalaris, I. J. Marie, M. R. Hassler, T. Javaheri, O. Aksoy, J. K. Blayney, N. Prutsch, A. Skucha, M. Herac, O. H. Kramer, P. Mazal, F. Grebien, G. Egger, V. Poli, W. Mikulits, R. Eferl, H. Esterbauer, R. Kennedy, F. Fend, M. Scharpf, M. Braun, S. Perner, D. E. Levy, T. Malcolm, S. D. Turner, A. Haitel, M. Susani, A. Moazzami, S. Rose-John, F. Aberger, O. Merkel, R. Moriggl, Z. Culig, H. Dolznig and L. Kenner. "Stat3 Regulated Arf Expression Suppresses Prostate Cancer Metastasis." *Nat Commun* 6, (2015): 7736.

Stoehr, L. C., C. Endes, I. Radauer-Preiml, M. S. Boyles, E. Casals, S. Balog, M. Pesch, A. Petri-Fink, B. Rothen-Rutishauser, M. Himly, M. J. Clift and A. Duschl. "Assessment of a Panel of Interleukin-8 Reporter Lung Epithelial Cell Lines to Monitor the Pro-Inflammatory Response Following Zinc Oxide Nanoparticle Exposure under Different Cell Culture Conditions." *Part Fibre Toxicol* 12, no. 1 (2015): 29.

April - June 2015

Diesner, S. C., C. Schultz, C. Ackaert, G. J. Oostingh, A. Ondracek, C. Stremnitzer, J. Singer, D. Heiden, F. Roth-Walter, J. Fazekas, V. E. Assmann, E. Jensen-Jarolim, H. Stutz, A. Duschl and E. Untersmayr. "Nitration of Beta-Lactoglobulin but Not of Ovomucoid Enhances Anaphylactic Responses in Food Allergic Mice." *PLoS One* 10, no. 5 (2015): e0126279.

Engelmann, J. C., T. Amann, B. Ott-Rotzer, M. Nutz, Y. Reinders, J. Reinders, W. E. Thasler, T. Kristl, A. Teufel, C. G. Huber, P. J. Oefner, R. Spang and C. Hellerbrand. "Causal Modeling of Cancer-Stromal Communication Identifies Pappa as a Novel Stroma-Secreted Factor Activating Nfkapb Signaling in Hepatocellular Carcinoma." *PLoS Comput Biol* 11, no. 5 (2015): e1004293.

Laimer, J., H. Hofer, M. Fritz, S. Wegenkittl and P. Lackner. "Maestro - Multi Agent Stability Prediction Upon Point Mutations." *BMC Bioinformatics* 16, no. 1 (2015): 116.

Perna, A. M., T. Rodrigues, T. P. Schmidt, M. Bohm, K. Stutz, D. Reker, B. Pfeiffer, K. H. Altmann, S. Backert, S. Wessler and G. Schneider. "Fragment-Based De Novo Design Reveals a Small-Molecule Inhibitor of Helicobacter Pylori HtrA." *Angew Chem Int Ed Engl*, (2015).

Pichler, U., M. Hauser, M. Wolf, M. L. Bernardi, G. Gadermaier, R. Weiss, C. Ebner, H. Yokoi, T. Takai, A. Didierlaurent, C. Radaiani, P. Briza, A. Mari, H. Behrendt, M. Wallner and F. Ferreira. "Pectate Lyase Pollen Allergens: Sensitization Profiles and Cross-Reactivity Pattern." *PLoS One* 10, no. 5 (2015): e0120038.

Ranninger, C., M. Rurik, A. Limonciel, S. Ruzek, R. Reischl, A. Wilmes, P. Jennings, P. Hewitt, W. Dekant, O. Kohlbacher and C. G. Huber. "Nephron Toxicity Profiling Via Untargeted Metabolome Analysis Employing a High-Performance Liquid Chromatography-Mass Spectrometry-Based Experimental and Computational Pipeline." *J Biol Chem*, (2015).

Saptarshi, S. R., A. Duschl and A. L. Lopata. "Biological Reactivity of Zinc Oxide Nanoparticles with Mammalian Test Systems: An Overview." *Nanomedicine (Lond)*, (2015): 1-18.

Schneider, S., G. Carra, U. Sahin, B. Hoy, G. Rieder and S. Wessler. "Correction for Schneider Et Al., Complex Cellular Responses of Helicobacter Pylori-Colonized Gastric Adenocarcinoma Cells." *Infect Immun* 83, no. 7 (2015): 3003.

Schubert, M., M. J. Walczak, M. Aebi and G. Wider. "Posttranslational Modifications of Intact Proteins Detected by Nmr Spectroscopy: Application to Glycosylation." *Angew Chem Int Ed Engl* 54, no. 24 (2015): 7096-100.

Schultz, L., M. G. Zurich, M. Culot, A. da Costa, C. Landry, P. Bellwon, T. Kristl, K. Hormann, S. Ruzek, S. Aiche, K. Reinert, C. Bielow, F. Gosselet, R. Cecchelli, C. G. Huber, O. H. Schroeder, A. Gramowski-Voss, D. G. Weiss and A. Bal-Price. "Evaluation of Drug-Induced Neurotoxicity Based on Metabolomics, Proteomics and Electrical Activity Measurements in Complementary Cns in Vitro Models." *Toxicol In Vitro*, (2015).

- Schutz, A., K. Roser, J. Klitzsch, F. Lieder, F. Aberger, W. Gruber, K. M. Mueller, A. Pupyshev, R. Moriggl and K. Friedrich. "Lung Adenocarcinomas and Lung Cancer Cell Lines Show Association of Mmp-1 Expression with Stat3 Activation." *Transl Oncol* 8, no. 2 (2015): 97-105.
- Stoehr, L. C., P. Madl, M. S. Boyles, R. Zauner, M. Wimmer, H. Wiegand, A. Andosch, G. Kasper, M. Pesch, U. Lutz-Meindl, M. Himly and A. Duschl. "Enhanced Deposition by Electrostatic Field-Assistance Aggravating Diesel Exhaust Aerosol Toxicity for Human Lung Cells." *Environ Sci Technol*, (2015).
- Stutz, H., N. Bresgen and P. M. Eckl. "Analytical Tools for the Analysis of Beta-Carotene and Its Degradation Products." *Free Radic Res* 49, no. 5 (2015): 650-80.
- Weber, C. S., K. Hainz, T. Deressa, H. Strandt, D. Florindo Pinheiro, R. Mittermair, J. Pizarro Pesado, J. Thalhamer, P. Hammerl and A. Stoecklinger. "Immune Reactions against Gene Gun Vaccines Are Differentially Modulated by Distinct Dendritic Cell Subsets in the Skin." *PLoS One* 10, no. 6 (2015): e0128722.
- Weiss, R., S. Scheiblhofer and J. Thalhamer. "What Is the Antiallergic Potential of DNA Vaccination?" *Immunotherapy*, (2015): 1-4.
- Wimmer, M., F. Alessandrini, S. Gilles, U. Frank, S. Oeder, M. Hauser, J. Ring, F. Ferreira, D. Ernst, J. B. Winkler, P. Schmitt-Kopplin, C. Ohnmacht, H. Behrendt, C. Schmidt-Weber, C. Traidl-Hoffmann and J. Gutermuth. "Pollen-Derived Adenosine Is a Necessary Cofactor for Ragweed Allergy." *Allergy*, (2015).
- Wolkerstorfer, S., E. Schwaiger, M. Rinnerthaler, I. Karina Gratz, T. Zoegg, H. Brandstetter and G. Achatz-Straussberger. "Hax1 Deletion Impairs Bcr Internalization and Leads to Delayed Bcr-Mediated Apoptosis." *Cell Mol Immunol*, (2015).
- Wollmann, E., C. Hamsten, E. Sibanda, M. Ochome, M. Focke-Tejkl, A. Asarnoj, A. Onell, G. Lilja, D. Gallerano, C. Lupinek, T. Thalhamer, R. Weiss, J. Thalhamer, M. Wickman, R. Valenta and M. van Hage. "Natural Clinical Tolerance to Peanut in African Patients Is Caused by Poor Allergenic Activity of Peanut Ige." *Allergy* 70, no. 6 (2015): 638-52.

January - March 2015

- Abfalter, C.M., T.P. Schmidt and S. Wessler. „Proteolytic activities expressed by gastrointestinal pathogens *Bacillus cereus*, *Listeria monocytogenes* and *Enterococcus faecium* in different growth phases.” *Br Microbiol Res J* 7 (2015): 62-70.
- Dall, E., J. C. Fegg, P. Briza and H. Brandstetter. "Structure and Mechanism of an Aspartimide-Dependent Peptide Ligase in Human Legumain." *Angew Chem Int Ed Engl* 54, no. 10 (2015): 2917-21.
- Grabner, B., D. Schramek, K. M. Mueller, H. P. Moll, J. Svinka, T. Hoffmann, E. Bauer, L. Blaas, N. Hruschka, K. Zboray, P. Stiedl, H. Nivarthi, E. Bogner, W. Gruber, T. Mohr, R. H. Zwick, L. Kenner, V. Poli, F. Aberger, D. Stoiber, G. Egger, H. Esterbauer, J. Zuber, R. Moriggl, R. Eferl, B. Gyorffy, J. M. Penninger, H. Popper and E. Casanova. "Disruption of Stat3 Signalling Promotes Kras-Induced Lung Tumorigenesis." *Nat Commun* 6, (2015): 6285.
- Kern, D., G. Regl, S. W. Hofbauer, P. Altenhofer, G. Achatz, A. Dlugosz, H. Schnidar, R. Greil, T. N. Hartmann and F. Aberger. "Hedgehog/Gli and Pi3k Signaling in the Initiation and Maintenance of Chronic Lymphocytic Leukemia." *Oncogene*, (2015).

- Kitzmüller, C., N. Zulehner, A. Roulias, P. Briza, F. Ferreira, I. Fae, G. F. Fischer and B. Bohle. "Correlation of Sensitizing Capacity and T-Cell Recognition within the Bet V 1 Family." *J Allergy Clin Immunol*, (2015).
- Moro, A. M., N. Brucker, M. F. Charao, E. Sauer, F. Freitas, J. Durgante, G. Bubols, S. Campanharo, R. Linden, A. P. Souza, C. Bonorino, R. Moresco, D. Pilger, A. Gioda, S. Farsky, A. Duschl and S. C. Garcia. "Early Hematological and Immunological Alterations in Gasoline Station Attendants Exposed to Benzene." *Environ Res* 137, (2015): 349-56.
- Propster, J. M., F. Yang, B. Ernst, F. H. Allain and M. Schubert. "Functional Siglec Lectin Domains from Soluble Expression in the Cytoplasm of Escherichia Coli." *Protein Expr Purif* 109, (2015): 14-22.
- Safiarian, M. J., H. Pertl-Obermeyer, P. Lughofer, R. Hude, A. Bertl and G. Obermeyer. "Lost in Traffic? The K(+) Channel of Lily Pollen, Lilkt1, Is Detected at the Endomembranes inside Yeast Cells, Tobacco Leaves, and Lily Pollen." *Front Plant Sci* 6, (2015): 47.
- Schlinkert, P., E. Casals, M. Boyles, U. Tischler, E. Hornig, N. Tran, J. Zhao, M. Himly, M. Riediker, G. Oostingh, V. Puentes and A. Duschl. "The oxidative potential of differently charged silver and gold nanoparticles on three human lung epithelial cell types." *JNanobiotech* 13, (2015).

October - December 2014

- Focke-Tejkl, M., M. Weber, K. Niespodziana, A. Neubauer, H. Huber, R. Henning, G. Stegellner, B. Maderegger, M. Hauer, F. Stolz, V. Niederberger, K. Marth, J. Eckl-Dorna, R. Weiss, J. Thalhamer, K. Blatt, P. Valent and R. Valenta. "Development and Characterization of a Recombinant, Hypoallergenic, Peptide-Based Vaccine for Grass Pollen Allergy." *J Allergy Clin Immunol*, (2014).
- Gadermaier, G. "Non-Specific Lipid Transfer Proteins: A Protein Family in Search of an Allergenic Pattern." *Int Arch Allergy Immunol* 164, no. 3 (2014): 169-70.
- Grutsch, S., J. E. Fuchs, R. Freier, S. Kofler, M. Bibi, C. Asam, M. Wallner, F. Ferreira, H. Brandstetter, K. R. Liedl and M. Tollinger. "Ligand Binding Modulates the Structural Dynamics and Compactness of the Major Birch Pollen Allergen." *Biophys J* 107, no. 12 (2014): 2963-72.
- Isakovic, A., R. Weiss, J. Thalhamer and S. Scheiblhofer. "Protective and Therapeutic DNA Vaccination against Allergic Diseases." *Methods Mol Biol* 1143, (2014): 243-58.
- Kristl, T. and H. Stutz. "Comparison of Different Mobilization Strategies for Capillary Isoelectric Focusing of Ovalbumin Variants." *J Sep Sci* 38, no. 1 (2015): 148-56.
- Lang, V., B. Usadel and G. Obermeyer. "De Novo Sequencing and Analysis of the Lily Pollen Transcriptome: An Open Access Data Source for an Orphan Plant Species." *Plant Mol Biol* 87, no. 1-2 (2015): 69-80.
- Neu, V., C. Bielow, K. Reinert and C. G. Huber. "Ultrahigh-Performance Liquid Chromatography-Ultraviolet Absorbance Detection-High-Resolution-Mass Spectrometry Combined with Automated Data Processing for Studying the Kinetics of Oxidative Thermal Degradation of Thyroxine in the Solid State." *J Chromatogr A* 1371, (2014): 196-203.
- Schwarz, H., M. Schmittner, A. Duschl and J. Horejs-Hoeck. "Residual Endotoxin Contaminations in Recombinant Proteins Are Sufficient to Activate Human Cd1c+ Dendritic Cells." *PLoS One* 9, no. 12 (2014): e113840.

Skala, W., D. T. Utzschneider, V. Magdolen, M. Debela, S. Guo, C. S. Craik, H. Brandstetter and P. Goettig. "Structure-Function Analyses of Human Kallikrein-Related Peptidase 2 Establish the 99-Loop as Master Regulator of Activity." *J Biol Chem* 289, no. 49 (2014): 34267-83.

Wilmes, A., C. Bielow, C. Ranninger, P. Bellwon, L. Aschauer, A. Limonciel, H. Chassaigne, T. Kristl, S. Aiche, C. G. Huber, C. Guillou, P. Hewitt, M. O. Leonard, W. Dekant, F. Bois and P. Jennings. "Mechanism of Cisplatin Proximal Tubule Toxicity Revealed by Integrating Transcriptomics, Proteomics, Metabolomics and Biokinetics." *Toxicol In Vitro*, (2014).

July - September 2014

Ackaert, C., S. Kofler, J. Horejs-Hoeck, N. Zulehner, C. Asam, S. von Grafenstein, J. E. Fuchs, P. Briza, K. R. Liedl, B. Bohle, F. Ferreira, H. Brandstetter, G. J. Oostingh and A. Duschl. "The Impact of Nitration on the Structure and Immunogenicity of the Major Birch Pollen Allergen Bet V 1.0101." *PLoS One* 9, no. 8 (2014): e104520.

Beisswenger, M. and C. Cabrele. "Self-Recognition Behavior of a Helix-Loop-Helix Domain by a Fragment Scan." *Biochim Biophys Acta* 1844, no. 9 (2014): 1675-83.

Cabrele, C., T. A. Martinek, O. Reiser and L. Berlicki. "Peptides Containing Beta-Amino Acid Patterns: Challenges and Successes in Medicinal Chemistry." *J Med Chem*, (2014).

Deifl, S., C. Zwicker, E. Vejvar, C. Kitzmuller, G. Gadermaier, B. Nagl, S. Vrtala, P. Briza, G. J. Zlabinger, B. Jahn-Schmid, F. Ferreira and B. Bohle. "Glutathione-S-Transferase: A Minor Allergen in Birch Pollen Due to Limited Release from Hydrated Pollen." *PLoS One* 9, no. 10 (2014): e109075.

Deressa, T., A. Stoecklinger, M. Wallner, M. Himly, S. Kofler, K. Hainz, H. Brandstetter, J. Thalhamer and P. Hammerl. "Structural Integrity of the Antigen Is a Determinant for the Induction of T-Helper Type-1 Immunity in Mice by Gene Gun Vaccines against E. Coli Beta-Galactosidase." *PLoS One* 9, no. 7 (2014): e102280.

Eibl, C., M. Hessenberger, J. Wenger and H. Brandstetter. "Structures of the Nlrp14 Pyrin Domain Reveal a Conformational Switch Mechanism Regulating Its Molecular Interactions." *Acta Crystallogr D Biol Crystallogr* 70, no. Pt 7 (2014): 2007-18.

Feinweber, D., T. Verwanger, O. Bruggemann, I. Teasdale and B. Krammer. "Applicability of New Degradable Hypericin-Polymer-Conjugates as Photosensitizers: Principal Mode of Action Demonstrated by in Vitro Models." *Photochem Photobiol Sci*, (2014).

Gratz, I. K. and D. J. Campbell. "Organ-Specific and Memory Treg Cells: Specificity, Development, Function, and Maintenance." *Front Immunol* 5, (2014): 333.

Gruber, W. Anna-Maria Frischauf and Aberger, F. "An old friend with new skills: Imiquimod as novel inhibitor of Hedgehog signaling in basal cell carcinoma". *Oncoscience* 1, no 9 (2014): 567-573.

April - June 2014

Aberger, F. and I. Altaba A. Ruiz. "Context-Dependent Signal Integration by the Gli Code: The Oncogenic Load, Pathways, Modifiers and Implications for Cancer Therapy." *Semin Cell Dev Biol*, (2014).

- Asam, C., A. L. Batista, A. H. Moraes, V. S. de Paula, F. C. Almeida, L. Aglas, C. Kitzmuller, B. Bohle, C. Ebner, F. Ferreira, M. Wallner and A. P. Valente. "Bet V 1 - a Trojan Horse for Small Ligands Boosting Allergic Sensitization?" *Clin Exp Allergy*, (2014).
- Eckhard, U., P. F. Huesgen, H. Brandstetter and C. M. Overall. "Proteomic Protease Specificity Profiling of Clostridial Collagenases Reveals Their Intrinsic Nature as Dedicated Degradors of Collagen." *J Proteomics* 100, (2014): 102-14.
- Ferreira, F., M. Wolf and M. Wallner. "Molecular Approach to Allergy Diagnosis and Therapy." *Yonsei Med J* 55, no. 4 (2014): 839-52.
- Heimesaat, M. M., A. Fischer, R. Plickert, T. Wiedemann, C. Loddenkemper, U. B. Gobel, S. Bereswill and G. Rieder. "Helicobacter Pylori Induced Gastric Immunopathology Is Associated with Distinct Microbiota Changes in the Large Intestines of Long-Term Infected Mongolian Gerbils." *PLoS One* 9, no. 6 (2014): e100362.
- Lang, V., H. Pertl-Obermeyer, M. J. Safiarian and G. Obermeyer. "Pump up the Volume - a Central Role for the Plasma Membrane H(+) Pump in Pollen Germination and Tube Growth." *Protoplasma* 251, no. 3 (2014): 477-88.
- Maier, E., D. Werner, A. Duschl, B. Bohle and J. Horejs-Hoeck. "Human Th2 but Not Th9 Cells Release IL-31 in a Stat6/Nf-Kappab-Dependent Way." *J Immunol*, (2014).
- Pertl-Obermeyer, H., W. X. Schulze and G. Obermeyer. "In Vivo Cross-Linking Combined with Mass Spectrometry Analysis Reveals Receptor-Like Kinases and Ca Signalling Proteins as Putative Interaction Partners of Pollen Plasma Membrane H ATPases." *J Proteomics* 108C, (2014): 17-29.
- Teperino, R., F. Aberger, H. Esterbauer, N. Riobo and J. A. Pospisilik. "Canonical and Non-Canonical Hedgehog Signalling and the Control of Metabolism." *Semin Cell Dev Biol*, (2014).
- Wiederstein, M., M. Gruber, K. Frank, F. Melo and M. J. Sippl. "Structure-Based Characterization of Multiprotein Complexes." *Structure*, (2014).

January - March 2014

- Isakovic A., R. Weiss, J. Thalhamer, S. Scheiblhofer. "Protective and therapeutic DNA vaccination against allergic diseases." *Methods Mol Biol*. 2014; 1143:243-58
- Gangl, R., R. Behmüller, R. Tenhaken. "Molecular Cloning of a Novel Glucuronokinase/Putative Pyrophosphorylase from Zebrafish Acting in an UDP-Glucuronic Acid Salvage Pathway." *PLoS ONE* 9(2): e89690, (2014).
- Behmuller, R., I. C. Forstenlehner, R. Tenhaken and C. G. Huber. "Quantitative Hplc-Ms Analysis of Nucleotide Sugars in Plant Cells Following Off-Line Spe Sample Preparation." *Anal Bioanal Chem*, (2014).
- Cabauatan, C. R., C. Lupinek, S. Scheiblhofer, R. Weiss, M. Focke-Tejkl, P. L. Bhalla, M. B. Singh, P. A. Knight, M. van Hage, J. D. Ramos and R. Valenta. "Allergen Microarray Detects High Prevalence of Asymptomatic IgE Sensitizations to Tropical Pollen-Derived Carbohydrates." *J Allergy Clin Immunol* 133, no. 3 (2014): 910-914 e5.

- Forstenlehner, I. C., J. Holzmann, K. Scheffler, W. Wieder, H. Toll and C. G. Huber. "A Direct-Infusion- and Hplc-Esi-Orbitrap-Ms Approach for the Characterization of Intact Pegylated Proteins." *Anal Chem* 86, no. 1 (2014): 826-34.
- Gadermaier G., S. Eichhorn, E. Vejvar, L. Weilnböck, R. Lang, P. Briza, C.G. Huber, F. Ferreira, T. Hawranek. "Plantago lanceolata: An important trigger of summer pollinosis with limited IgE cross-reactivity." *J Allergy Clin Immunol*, (2014).
- Gadermaier, G., M. Hauser and F. Ferreira. "Allergens of Weed Pollen: An Overview on Recombinant and Natural Molecules." *Methods* 66, no. 1 (2014): 55-66.
- Heilmann M., A. Wellner, G. Gadermaier, A. Ilchmann, P. Briza, M. Krause, R. Nagai, S. Burgdorf, S. Scheurer, S. Vieths, T. Henle, M. Toda. "Ovalbumin Modified with Pyrraline, a Maillard Reaction Product, shows Enhanced T-cell Immunogenicity." *J Biol Chem*, (2014).
- Hofbauer, S. W., P. W. Krenn, S. Ganghammer, D. Asslaber, U. Pichler, K. Oberascher, R. Henschler, M. Wallner, H. Kerschbaum, R. Greil and T. N. Hartmann. "Tiam1/Rac1 Signals Contribute to Proliferation and Chemoresistance but Not Motility of Chronic Lymphocytic Leukemia Cells." *Blood*, (2014).
- Larisch, P., T. Verwanger, M. Linecker and B. Krammer. "The Interrelation between a Pro-Inflammatory Milieu and Fluorescence Diagnosis or Photodynamic Therapy of Human Skin Cell Lines." *Photodiagnosis Photodyn Ther*, (2014).
- Martano, G., E. Bojaxhi, I. C. Forstenlehner, C. G. Huber, N. Bresgen, P. M. Eckl and H. Stutz. "Validation and Application of Sub-2 Mum Core-Shell Uhpplc-Uv-Esi-Orbitrap Ms for Identification and Quantification of Beta-Carotene and Selected Cleavage Products with Preceding Solid-Phase Extraction." *Anal Bioanal Chem*, (2014).
- Pertl-Obermeyer, H. and G. Obermeyer. "Pollen Cultivation and Preparation for Proteomic Studies." *Methods Mol Biol* 1072, (2014): 435-49.
- Pichler, U., M. Hauser, H. Hofer, M. Himly, E. Hoflehner, M. Steiner, S. Mutschlechner, K. Hufnagl, C. Ebner, A. Mari, P. Briza, B. Bohle, U. Wiedermann, F. Ferreira and M. Wallner. "Allergen Hybrids - Next Generation Vaccines for Fagales Pollen Immunotherapy." *Clin Exp Allergy* 44, no. 3 (2014): 438-49.
- Putz, E. M., M. A. Hoelzl, J. Baeck, Z. Bago-Horvath, C. Schuster, B. Reichholf, D. Kern, F. Aberger, V. Sexl and A. Hoelbl-Kovacic. "Loss of Stat3 in Lymphoma Relaxes Nk Cell-Mediated Tumor Surveillance." *Cancers (Basel)* 6, no. 1 (2014): 193-210.
- Reinmuth-Selzle K., C. Ackaert, C.J. Kampf, M. Samonig, M. Shiraiwa, S. Kofler, H. Yang, G. Gadermaier, H. Brandstetter, C.G. Huber, A. Duschl, G.J. Oostingh, U. Pöschl. "Nitration of the Birch Pollen Allergen Bet v 1.0101: Efficiency and Site-Selectivity of Liquid and Gaseous Nitrating Agents." *J Proteome Res*, (2014).
- Roulias, A., U. Pichler, M. Hauser, M. Himly, H. Hofer, P. Lackner, C. Ebner, P. Briza, B. Bohle, M. Egger, M. Wallner and F. Ferreira. "Differences in the Intrinsic Immunogenicity and Allergenicity of Bet V 1 and Related Food Allergens Revealed by Site-Directed Mutagenesis." *Allergy* 69, no. 2 (2014): 208-15.
- Schulke, S., S. Wolfheimer, G. Gadermaier, A. Wangorsch, S. Siebeneicher, P. Briza, I. Spreitzer, D. Schiller, B. Loeschner, S. Uematsu, B. Ryffel, S. Akira, Z. Waibler, S. Vieths, M. Toda and S. Scheurer. "Prevention of Intestinal Allergy in Mice by Rflaa:Ova Is Associated with Enforced Antigen Processing and Tlr5-Dependent Il-10 Secretion by Mdc." *PLoS One* 9, no. 2 (2014): e87822.

Zuidmeer-Jongejan L., M. Fernández-Rivas, M.G. Winter, J.H. Akkerdaas, C. Summers, A. Lebens, A.C. Knulst, P. Schilte, P. Briza, G. Gadermaier, R. van Ree. "Oil body-associated hazelnut allergens including oleosins are underrepresented in diagnostic extracts but associated with severe symptoms." *Clin Transl Allergy*, (2014).

October - December 2013

Eckhard, U., P. F. Huesgen, H. Brandstetter and C. M. Overall. "Proteomic Protease Specificity Profiling of Clostridial Collagenases Reveals Their Intrinsic Nature as Dedicated Degradors of Collagen." *J Proteomics*, (2013).

Lang, V., H. Pertl-Obermeyer, M. J. Safiarian and G. Obermeyer. "Pump up the Volume - a Central Role for the Plasma Membrane H Pump in Pollen Germination and Tube Growth." *Protoplasma*, (2013).

Pichler, U., C. Asam, R. Weiss, A. Isakovic, M. Hauser, P. Briza, F. Ferreira and M. Wallner. "The Fold Variant Bm4 Is Beneficial in a Therapeutic Bet V 1 Mouse Model." *Biomed Res Int* 2013, (2013): 832404.

Pichler, U., M. Hauser, H. Hofer, M. Himly, E. Hoflehner, M. Steiner, S. Mutschlechner, K. Hufnagl, C. Ebner, A. Mari, P. Briza, B. Bohle, U. Wiedermann, F. Ferreira and M. Wallner. "Allergen-Hybrids - Next Generation Vaccines for Fagales Pollen Immunotherapy." *Clin Exp Allergy*, (2013).

Posselt, G., S. Backert and S. Wessler. "The Functional Interplay of *Helicobacter Pylori* Factors with Gastric Epithelial Cells Induces a Multi-Step Process in Pathogenesis." *Cell Commun Signal* 11, (2013): 77.

Roulias, A., U. Pichler, M. Hauser, M. Himly, H. Hofer, P. Lackner, C. Ebner, P. Briza, B. Bohle, M. Egger, M. Wallner and F. Ferreira. "Differences in the Intrinsic Immunogenicity and Allergenicity of Bet V 1 and Related Food Allergens Revealed by Site-Directed Mutagenesis." *Allergy*, (2013).

Skala, W., P. Goettig and H. Brandstetter. "Do-It-Yourself Histidine-Tagged Bovine Enterokinase: A Handy Member of the Protein Engineer's Toolbox." *J Biotechnol* 168, no. 4 (2013): 421-5.

Vejvar, E., M. Himly, P. Briza, S. Eichhorn, C. Ebner, W. Hemmer, F. Ferreira and G. Gadermaier. "Allergenic Relevance of Nonspecific Lipid Transfer Proteins 2: Identification and Characterization of Api G 6 from Celery Tuber as Representative of a Novel IgE-Binding Protein Family." *Mol Nutr Food Res* 57, no. 11 (2013): 2061-70.

Wallner, M., U. Pichler and F. Ferreira. "Recombinant Allergens for Pollen Immunotherapy." *Immunotherapy* 5, no. 12 (2013): 1323-38.

Weiss, R., S. Scheiblhofer, Y. Machado and J. Thalhamer. "New Approaches to Transcutaneous Immunotherapy: Targeting Dendritic Cells with Novel Allergen Conjugates." *Curr Opin Allergy Clin Immunol* 13, no. 6 (2013): 669-76.

Weiss, R., S. Scheiblhofer and J. Thalhamer. "Allergens Are Not Pathogens: Why Immunization against Allergy Differs from Vaccination against Infectious Diseases." *Hum Vaccin Immunother* 10, no. 3 (2013).

Winter, S., N. Tortik, A. Kubin, B. Krammer and K. Plaetzer. "Back to the Roots: Photodynamic Inactivation of Bacteria Based on Water-Soluble Curcumin Bound to Polyvinylpyrrolidone as a Photosensitizer." *Photochem Photobiol Sci* 12, no. 10 (2013): 1795-802.

Wolff, F., A. Loipetzberger, W. Gruber, H. Esterbauer, F. Aberger and A. M. Frischauf. "Imiquimod Directly Inhibits Hedgehog Signalling by Stimulating Adenosine Receptor/Protein Kinase a-Mediated Gli Phosphorylation." *Oncogene* 32, no. 50 (2013): 5574-81.

August and September 2013

Laner-Plamberger, S., F. Wolff, A. Kaser-Eichberger, S. Swierczynski, C. Hauser-Kronberger, A. M. Frischauf and T. Eichberger. "Hedgehog/Gli Signaling Activates Suppressor of Cytokine Signaling 1 (Socs1) in Epidermal and Neural Tumor Cells." *PLoS One* 8, no. 9 (2013): e75317.

Obermeyer, G., L. Fragner, V. Lang and W. Weckwerth. "Dynamic Adaption of Metabolic Pathways During Germination and Growth of Lily Pollen Tubes after Inhibition of the Electron Transport Chain." *Plant Physiol* 162, no. 4 (2013): 1822-33

Oostingh, G. J., E. Papaioannou, L. Chasapidis, T. Akritidis, A. G. Konstandopoulos and A. Duschl. "Development of an on-Line Exposure System to Determine Freshly Produced Diesel Engine Emission-Induced Cellular Effects." *Toxicol In Vitro* 27, no. 6 (2013): 1746-52.

Vejvar, E., M. Himly, P. Briza, S. Eichhorn, C. Ebner, W. Hemmer, F. Ferreira and G. Gadermaier. "Allergenic Relevance of Nonspecific Lipid Transfer Proteins 2: Identification and Characterization of Api G 6 from Celery Tuber as Representative of a Novel Ige-Binding Protein Family." *Mol Nutr Food Res*, (2013)

Weinberger, E. E., A. Isakovic, S. Scheiblhofer, C. Ramsauer, K. Reiter, C. Hauser-Kronberger, J. Thalhamer and R. Weiss. "The Influence of Antigen Targeting to Sub-Cellular Compartments on the Anti-Allergic Potential of a DNA Vaccine." *Vaccine*, (2013).

Wenger, J., E. Klinglmayr, C. Frohlich, C. Eibl, A. Gimeno, M. Hessenberger, S. Puehringer, O. Daumke and P. Goettig. "Functional Mapping of Human Dynamin-1-Like Gtpase Domain Based on X-Ray Structure Analyses." *PLoS One* 8, no. 8 (2013): e71835.

Wolff, F., A. Loipetzberger, W. Gruber, H. Esterbauer, F. Aberger and A. M. Frischauf. "Imiquimod Directly Inhibits Hedgehog Signalling by Stimulating Adenosine Receptor/Protein Kinase a-Mediated Gli Phosphorylation." *Oncogene*, (2013).

June and July 2013

Dall, E. and H. Brandstetter. "Mechanistic and Structural Studies on Legumain Explain Its Zymogenicity, Distinct Activation Pathways, and Regulation." *Proc Natl Acad Sci U S A* 110, no. 27 (2013): 10940-5.

Eckhard, U., E. Schonauer and H. Brandstetter. "Structural Basis for Activity Regulation and Substrate Preference of Clostridial Collagenases G, H, and T." *J Biol Chem* 288, no. 28 (2013): 20184-94.

Gadermaier, G., M. Hauser and F. Ferreira. "Allergens of Weed Pollen: An Overview on Recombinant and Natural Molecules." *Methods*, (2013).

- Griessner, A., T. Zogg and H. Brandstetter. "The Activation Peptide of Coagulation Factor Ix and X Serves as a High Affinity Receptor to Cationic Ligands." *Thromb Haemost* 110, no. 3 (2013).
- Gusenkov, S., C. Ackaert and H. Stutz. "Separation and Characterization of Nitrated Variants of the Major Birch Pollen Allergen by Cze-Esi-Mutof Ms." *Electrophoresis*, (2013).
- Hessenberger, M., R. Weiss, E. E. Weinberger, C. Boehler, J. Thalhamer and S. Scheiblhofer. "Transcutaneous Delivery of Cpg-Adjuvanted Allergen Via Laser-Generated Micropores." *Vaccine* 31, no. 34 (2013): 3427-34.
- Scheiblhofer, S., J. Thalhamer and R. Weiss. "Laser Microporation of the Skin: Prospects for Painless Application of Protective and Therapeutic Vaccines." *Expert Opin Drug Deliv* 10, no. 6 (2013): 761-73.
- Winter, S., N. Tortik, A. Kubin, B. Krammer and K. Plaetzer. "Back to the Roots: Photodynamic Inactivation of Bacteria Based on Water-Soluble Curcumin Bound to Polyvinylpyrrolidone as a Photosensitizer." *Photochem Photobiol Sci*, (2013).
- Zogg, T., M. Sponring, S. Schindler, M. Koll, R. Schneider, H. Brandstetter and B. Auer. "Crystal Structures of the Viral Protease Npro Imply Distinct Roles for the Catalytic Water in Catalysis." *Structure* 21, no. 6 (2013): 929-38.