

List of publications 2021

List of publications with involvement of GPF members. GPF authors are labeled as bold type. Publications headed by authors from scientific groups of the GC (first or last author) are additionally labeled with ❖.

- (1) Alachram H., Chereda H., **Beissbarth T.**, Wingender E. and Stegmaier P. (2021) Text mining-based word representations for biomedical data analysis and protein-protein interaction networks in machine learning tasks. *PLoS One*, 16, e0258623. ❖
- (2) Ambrozkiwicz M.C., Borisova E., Schwark M., Ripamonti S., Schaub T., Smorodchenko A., Weber A.I., Rhee H.J., Altas B., Yilmaz R., Mueller S., Piepkorn L., Horan S.T., Straussberg R., Zaqout S., **Jahn O.**, Dere E., Rosário M., Boehm-Sturm P., Borck G., Willig K.I., Rhee JS., Tarabykin V., Kawabe H. (2021) The murine ortholog of Kaufman oculocerebrofacial syndrome protein Ube3b regulates synapse number by ubiquitinating Ppp3cc. *Mol Psychiatry*, 26, 1980-1995. ❖
- (3) Ammer-Herrmenau C., Pfisterer N., van den Berg T., Gavrilova I., Amanzada A., Singh S.K., Khalil A., Alili R., Belda E., Clement K., Abd El Wahed A., Gady E.E., Haubrock M., **Beissbarth T.**, Ellenrieder V. and Neesse A. (2021) Comprehensive Wet-Bench and Bioinformatics Workflow for Complex Microbiota Using Oxford Nanopore Technologies. *mSystems*, 6, e0075021. ❖
- (4) Aquino G.R.R., Hackert P., Krogh N., Pan K.T., Jaafar M., Henras A.K., Nielsen H., **Urlaub H.**, Bohnsack K.E. and Bohnsack M.T. (2021) The RNA helicase Dbp7 promotes domain V/VI compaction and stabilization of inter-domain interactions during early 60S assembly. *Nat Commun*, 12, 6152. ❖
- (5) Barbarics B., Eildermann K., Kaderali L., Cyganek L., Plessmann U., Bodemeyer J., Paul T., Strobel P., **Urlaub H.**, Tirilomis T., **Lenz C.** and Bohnenberger H. (2021) Proteomic mapping of atrial and ventricular heart tissue in patients with aortic valve stenosis. *Sci Rep*, 11, 24389. ❖
- (6) Barysch S.V., Stankovic-Valentin N., Miedema T., Karaca S., Doppel J., Nait Achour T., Vasudeva A., Wolf L., Sticht C., **Urlaub H.** and Melchior F. (2021) Transient deSUMOylation of IRF2BP proteins controls early transcription in EGFR signaling. *EMBO Rep*, 22, e49651.
- (7) Bertelmann T., Berndzen L., Raber T., Pfeiffer S., **Leha A.**, Paul C., Feltgen N. and Bemme S. (2021) Predicting the individual probability of macular hole closure following intravitreal ocriplasmin injections for vitreomacular traction release using baseline characteristics. *Sci Rep*, 11, 24096. ❖
- (8) Blersch K.F., Burchert J.P., August S.C., Welp L., Neumann P., Köster S., **Urlaub H.** and Ficner R. (2021) Structural model of the M7G46 Methyltransferase TrmB in complex with tRNA. *RNA Biol*, 18, 2466-2479. ❖
- (9) Chen Y., Vos S.M., Dienemann C., Ninov M., **Urlaub H.** and Cramer P. (2021) Allosteric transcription stimulation by RNA polymerase II super elongation complex. *Mol Cell*, 81, 3386-3399.e10. ❖
- (10) Chereda H., Bleckmann A., Menck K., Perera-Bel J., Stegmaier P., Auer F., Kramer F., **Leha A.** and **Beissbarth T.** (2021) Explaining decisions of graph convolutional neural networks: patient-specific molecular subnetworks responsible for metastasis prediction in breast cancer. *Genome Med*, 13, 42. ❖

- (11) Cruz-Zaragoza L.D., Dennerlein S., Linden A., Yousefi R., Lavdovskaia E., Aich A., Falk R.R., Gomkale R., Schöndorf T., Bohnsack M.T., Richter-Dennerlein R., **Urlaub H.** and Rehling P. (2021) An in vitro system to silence mitochondrial gene expression. *Cell*, 184, 5824-5837.e15. ❖
- (12) De Oliveira T., Goldhardt T., Edelmann M., Rogge T., Rauch K., Kyuchukov N.D., Menck K., Bleckmann A., Kalucka J., Khan S., Gaedcke J., Haubrock M., **Beissbarth T.**, Bohnenberger H., Planque M., Fendt S.M., Ackermann L., Ghadimi M. and Conradi L.C. (2021) Effects of the Novel PFKFB3 Inhibitor KAN0438757 on Colorectal Cancer Cells and Its Systemic Toxicity Evaluation In Vivo. *Cancers (Basel)*, 13, 1011. ❖
- (13) de Vries S., Fürst-Jansen J.M.R., Irisarri I., Dhabalia Ashok A., Ischebeck T., **Feussner K.**, Abreu I.N., Petersen M., Feussner I. and de Vries J. (2021) The evolution of the phenylpropanoid pathway entailed pronounced radiations and divergences of enzyme families. *Plant J*, 107, 975-1002. ❖
- (14) **Dihazi H.**, Schwarze K., Patschan S., Müller G.A., Ritter O., Zeisberg M. and Patschan D. (2021) PAC-Mediated AKI Protection Is Critically Mediated but Does Not Exclusively Depend on Cell-Derived Microvesicles. *Int J Nephrol*, 2021, 8864183. ❖
- (15) Dröge L.H., Hennies S., Lorenzen S., Conradi L.C., Quack H., Liersch T., Helms C., Frank M.A., Schirmer M.A., Rave-Fränk M., **Beissbarth T.** and Wolff H.A. (2021) Prognostic value of the micronucleus assay for clinical endpoints in neoadjuvant radiochemotherapy for rectal cancer. *BMC Cancer*, 21, 219. ❖
- (16) Dusch N., Oldani M., Steffen T., Kitz J., Koenig U., Azizian A., König A., Ströbel P., **Beissbarth T.**, Ghadimi M. and Gaedcke J. (2021) Intensified Histopathological Work-Up after Pancreatic Head Resection Reveals Relevant Prognostic Markers. *Digestion*, 102, 265-273. ❖
- (17) Eidizadeh A., Fraune L., **Leha A.**, Wachter R., **Asif A.R.** and Binder L. (2021) Inconsistent Findings of Cardiac Troponin T and I in Clinical Routine Diagnostics: Factors of Influence. *J Clin Med*, 10, 3148. ❖
- (18) Fang P., Ji Y., Silbern I., Viner R., Oellerich T., Pan K.T. and **Urlaub H.** (2021) Evaluation and Optimization of High-Field Asymmetric Waveform Ion-Mobility Spectrometry for Multiplexed Quantitative Site-Specific N-Glycoproteomics. *Anal Chem*. ❖
- (19) Fianu I., Chen Y., Dienemann C., Dybkov O., Linden A., **Urlaub H.** and Cramer P. (2021) Structural basis of Integrator-mediated transcription regulation. *Science*, 374, 883-887. ❖
- (20) Fichtner A., Richter A., Filmar S., Gaisa N.T., Schweyer S., Reis H., Nettersheim D., Oing C., Gayer F.A., **Leha A.**, Küffer S., Ströbel P., Kaulfuss S. and Bremmer F. (2021) The detection of isochromosome i(12p) in malignant germ cell tumours and tumours with somatic malignant transformation by the use of quantitative real-time polymerase chain reaction. *Histopathology*, 78, 593-606. ❖
- (21) Friedrich S., Groß S., König I.R., Engelhardt S., Bahls M., Heinz J., Huber C., Kaderali L., Kelm M., **Leha A.**, Rühl J., Schaller J., Scherer C., Vollmer M., Seidler T., Friede T. (2021). Applications of artificial intelligence/machine learning approaches in cardiovascular medicine: a systematic review with recommendations. *European Heart Journal - Digital Health* 2, 424-436. ❖
- (22) Fromberger P., Schröder S., Bauer L., Siegel B., Tozdan S., Briken P., Buntrock C., Etzler S., Rettenberger M., **Leha A.** and Müller J.L. (2021) @myTabu-A Placebo Controlled Randomized Trial of a Guided Web-Based Intervention for Individuals Who Sexually Abused Children and Individuals Who Consumed Child Sexual Exploitation Material: A Clinical Study Protocol. *Front Psychiatry*, 11, 575464. ❖

- (23) Gao X., Herrero S., Wernet V., Erhardt S., **Valerius O.**, Braus G.H. and Fischer R. (2021) The role of *Aspergillus nidulans* polo-like kinase PlkA in microtubule-organizing center control. *J Cell Sci*, 134, jcs256537.
- (24) Giacomelli C., Jung J., Wachter A., Ibing S., Will R., Uhlmann S., Mannsperger H., Sahin O., Yarden Y., **Beissbarth T.**, Korf U., Körner C. and Wiemann S. (2021) Coordinated regulation of WNT/beta-catenin, c-Met, and integrin signalling pathways by miR-193b controls triple negative breast cancer metastatic traits. *BMC Cancer*, 21, 1296.
- (25) Gomkale R., Linden A., Neumann P., Schendzielorz A.B., Stoldt S., Dybkov O., Kilisch M., Schulz C., Cruz-Zaragoza L.D., Schwappach B., Ficner R., Jakobs S., **Urlaub H.** and Rehling P. (2021) Mapping protein interactions in the active TOM-TIM23 supercomplex. *Nat Commun*, 12, 5715. ❖
- (26) Grass L.M., Wollenhaupt J., Barthel T., Parfentev I., **Urlaub H.**, Loll B., Klauck E., Antelmann H. and Wahl M.C. (2021) Large-scale ratcheting in a bacterial DEAH/RHA-type RNA helicase that modulates antibiotics susceptibility. *Proc Natl Acad Sci U S A*, 118, e2100370118.
- (27) Grebener B.L., Barth J., Anders S., **Beissbarth T.** and Raupach T. (2021) A prediction-based method to estimate student learning outcome: Impact of response rate and gender differences on evaluation results. *Med Teach*, 43, 524-530. ❖
- (28) Groth A., **Schmitt K.**, **Valerius O.**, Herzog B. and Pöggeler S. (2021) Analysis of the Putative Nucleoporin POM33 in the Filamentous Fungus *Sordaria macrospora*. *J Fungi (Basel)*, 7, 682. ❖
- (29) Güran A., Ji Y., Fang P., Pan K.T., **Urlaub H.**, Avkiran M. and **Lenz C.** (2021) Quantitative Analysis of the Cardiac Phosphoproteome in Response to Acute beta-Adrenergic Receptor Stimulation In Vivo. *Int J Mol Sci*, 22, 12584. ❖
- (30) Hallumi E., Shalah R., Lo W.L., Corso J., Oz I., Beach D., Wittman S., Isenberg A., Sela M., **Urlaub H.**, Weiss A. and Yablonski D. (2021) Itk Promotes the Integration of TCR and CD28 Costimulation through Its Direct Substrates SLP-76 and Gads. *J Immunol*, 206, 2322-2337.
- (31) Hasan B., Khan A., **Lenz C.**, **Asif A.R.** and Ahmed N. (2021) Characterization of functional protein complexes from Alzheimer's disease and healthy brain by mass spectrometry-based proteome analysis. *Sci Rep*, 11, 13891.
- (32) Helm M.S., Dankovich T.M., Mandad S., Rammner B., Jähne S., Salimi V., Koerbs C., Leibbrandt R., **Urlaub H.**, Schikorski T. and Rizzoli S.O. (2021) A large-scale nanoscopy and biochemistry analysis of postsynaptic dendritic spines. *Nat Neurosci*, 24, 1151-1162. ❖
- (33) Hillen H.S., Lavdovskaia E., Nadler F., Hanitsch E., Linden A., Bohnsack K.E., **Urlaub H.** and Richter-Dennerlein R. (2021) Structural basis of GTPase-mediated mitochondrial ribosome biogenesis and recycling. *Nat Commun*, 12, 3672. ❖
- (34) Höfer A.M., Harting R., Assmann N.F., Gerke J., **Schmitt K.**, Starke J., Bayram O., Tran V.T., **Valerius O.**, Braus-Stromeyer S.A. and Braus G.H. (2021) The velvet protein Vel1 controls initial plant root colonization and conidia formation for xylem distribution in *Verticillium wilt*. *PLoS Genet*, 17, e1009434. ❖
- (35) Horianopoulos L.C., Lee C.W.J., **Schmitt K.**, **Valerius O.**, Hu G., Caza M., Braus G.H. and Kronstad J.W. (2021) A J Domain Protein Functions as a Histone Chaperone to Maintain Genome Integrity and the Response to DNA Damage in a Human Fungal Pathogen. *mBio*, 12, e0327321.
- (36) James C., **Lenz C.**, **Urlaub H.** and Kehlenbach R.H. (2021) Sequestosome 1 Is Part of the Interaction Network of VAPB. *Int J Mol Sci*, 22, 13271. ❖

- (37) Janssen J.N., Izzi V., Henze E., Cingöz G., Lowen F., Küttner D., Neumann R., **Lenz C.**, Rosen V. and Miosge N. (2021) Enhancing the chondrogenic potential of chondrogenic progenitor cells by deleting RAB5C. *iScience*, 24, 102464. ❖
- (38) Kalya M., Kel A., Wlochowitz D., Wingender E. and **Beissbarth T.** (2021) IGFBP2 Is a Potential Master Regulator Driving the Dysregulated Gene Network Responsible for Short Survival in Glioblastoma Multiforme. *Front Genet*, 12, 670240. ❖
- (39) Katayama T., Bayram O., Mo T., Karahoda B., **Valerius O.**, Takemoto D., Braus G.H., Kitamoto K. and Maruyama J.I. (2021) Novel Fus3- and Ste12-interacting protein FsiA activates cell fusion-related genes in both Ste12-dependent and -independent manners in Ascomycete filamentous fungi. *Mol Microbiol*, 115, 723-738.
- (40) Khan N., Shahid S. and **Asif A.R.** (2021) Current Analytical Strategies in Studying Chromatin-Associated-Proteome (Chromatome). *Molecules*, 26, 6694. ❖
- (41) Klaus M., Rossini E., Linden A., Paithankar K.S., Zeug M., Ignatova Z., **Urlaub H.**, Khosla C., Köfing J., Hummer G. and Grininger M. (2021) Solution Structure and Conformational Flexibility of a Polyketide Synthase Module. *JACS Au*, 1, 2162-2171.
- (42) Klute M., Laekeman M., Kuss K., Petzke F., Dieterich A., **Leha A.**, Neblett R., Ehrhardt S., Ulma J. and Schäfer A. (2021) Cross-cultural adaptation and validation of the German Central Sensitization Inventory (CSI-GE). *BMC Musculoskelet Disord*, 22, 708. ❖
- (43) Koerdel K., Spitzner M., Meyer T., Engels N., Krause F., Gaedcke J., Conradi L.C., Haubrock M., **Beissbarth T.**, **Leha A.**, Johnsen S.A., Ghadimi B.M., Rose-John S., Grade M. and Wienands J. (2021) NOTCH Activation via gp130/STAT3 Signaling Confers Resistance to Chemoradiotherapy. *Cancers (Basel)*, 13, 455. ❖
- (44) Kokic G., Wagner F.R., Chernev A., **Urlaub H.** and Cramer P. (2021) Structural basis of human transcription-DNA repair coupling. *Nature*, 598, 368-372. ❖
- (45) Kraxner J., Lorenz C., Menzel J., Parfentev I., Silbern I., Denz M., **Urlaub H.**, Schwappach B. and Köster S. (2021) Post-translational modifications soften vimentin intermediate filaments. *Nanoscale*, 13, 380-387. ❖
- (46) Kretschmer L., Mitteldorf C., Hellriegel S., **Leha A.**, Fichtner A., Ströbel P., Schön M.P. and Bremmer F. (2021) The sentinel node invasion level (SNIL) as a prognostic parameter in melanoma. *Mod Pathol*, 34, 1839-1849. ❖
- (47) Lingor P., Koch J.C., Statland J.M., Hussain S., Hennecke C., Wu J., Langbein T., Ahmed R., Günther R., Ilse B., Kassubek J., Kollwe K., Kuttler J., **Leha A.**, Lengenfeld T., Meyer T., Neuwirth C., Tostmann R. and Benatar M. (2021) Challenges and opportunities for Multi-National Investigator-Initiated clinical trials for ALS: European and United States collaborations. *Amyotroph Lateral Scler Frontotemporal Degener*, 22, 419-425.
- (48) Liu L., Sasse C., Dirnberger B., **Valerius O.**, Fekete-Szücs E., Harting R., Nordzieke D.E., Pöggeler S., Karlovsky P., Gerke J. and Braus G.H. (2021) Secondary metabolites of Hülle cells mediate protection of fungal reproductive and overwintering structures against fungivorous animals. *Elife*, 10, e68058. ❖
- (49) Maes M.S., Kanzow P., Biermann J., **Leha A.**, Hrasky V. and Wiegand A. (2021) Risk factors for repeated general anesthesia for dental treatment of adult patients with intellectual and/or physical disabilities. *Clin Oral Investig*, 26, 1695-1700. ❖
- (50) Maier I.L., **Leha A.**, Badr M., Allam I., Bähr M., Jamous A., Hesse A., Psychogios M.N., Behme D. and Liman J. (2021) Inhouse Bridging Thrombolysis Is Associated With Improved Functional Outcome in Patients With Large Vessel Occlusion Stroke: Findings From the German Stroke Registry. *Front Neurol*, 12, 649108. ❖

- (51) Martinez Hernandez A., Silbern I., Geffers I., Tatenhorst L., Becker S., **Urlaub H.**, Zweckstetter M., Griesinger C. and Eichele G. (2021) Low-Expressing Synucleinopathy Mouse Models Based on Oligomer-Forming Mutations and C-Terminal Truncation of alpha-Synuclein. *Front Neurosci*, 15, 643391. ❖
- (52) Menck K., Heinrichs S., Wlochowitz D., Sitte M., Noeding H., Janshoff A., Treiber H., Ruhwedel T., Schatlo B., von der Brelie C., Wiemann S., Pukrop T., **Beissbarth T.**, Binder C. and Bleckmann A. (2021) WNT11/ROR2 signaling is associated with tumor invasion and poor survival in breast cancer. *J Exp Clin Cancer Res*, 40, 395. ❖
- (53) Mewes C., Alexander T., Büttner B., Hinz J., Alpert A., Popov A.F., **Beissbarth T.**, Tzvetkov M., Grade M., Quintel M., Bergmann I. and Mansur A. (2021) Effect of the Lymphocyte Activation Gene 3 Polymorphism rs951818 on Mortality and Disease Progression in Patients with Sepsis-A Prospective Genetic Association Study. *J Clin Med*, 10, 5302. ❖
- (54) Mishto M., Rodriguez-Hernandez G., Neefjes J., **Urlaub H.** and Liepe J. (2021) Response: Commentary: An In Silico-In Vitro Pipeline Identifying an HLA-A*02:01+ KRAS G12V+ Spliced Epitope Candidate for a Broad Tumor-Immune Response in Cancer Patients. *Front Immunol*, 12, 679836. ❖
- (55) Mohnike L., Rekhter D., Huang W., **Feussner K.**, Tian H., Herrfurth C., Zhang Y. and Feussner I. (2021) The glycosyltransferase UGT76B1 modulates N-hydroxy-pipecolic acid homeostasis and plant immunity. *Plant Cell*, 33, 735-749. ❖
- (56) Mühlhausen S., Schmitt H.D., Plessmann U., Mienkus P., Sternisek P., Perl T., Weig M., **Urlaub H.**, Bader O. and Kollmar M. (2021) Proteogenomics analysis of CUG codon translation in the human pathogen *Candida albicans*. *BMC Biol*, 19, 258. ❖
- (57) Naarmann-de Vries I.S., Senatore R., Moritz B., Marx G., **Urlaub H.**, Niessing D., Ostareck D.H. and Ostareck-Lederer A. (2021) Methylated HNRNPK acts on RPS19 to regulate ALOX15 synthesis in erythropoiesis. *Nucleic Acids Res*, 49, 3507-3523.
- (58) Noor A., Zafar S., Shafiq M., Younas N., Siegert A., Mann F.A., Kruss S., Schmitz M., **Dihazi H.**, Ferrer I. and Zerr I. (2021) Molecular Profiles of Amyloid-beta Proteoforms in Typical and Rapidly Progressive Alzheimer's Disease. *Mol Neurobiol*, 59, 17-34. ❖
- (59) Nyamsuren G., Rapp G., **Dihazi H.**, Zeisberg E.M., Tampe D., Tampe B. and Zeisberg M. (2021) PP2A phosphatase inhibition is anti-fibrotic through Ser77 phosphorylation-mediated ARNT/ARNT homodimer formation. *Sci Rep*, 11, 24075. ❖
- (60) Osman S., Mohammad E., Lidschreiber M., Stuetzer A., Bazsó F.L., Maier K.C., **Urlaub H.** and Cramer P. (2021) The Cdk8 kinase module regulates interaction of the mediator complex with RNA polymerase II. *J Biol Chem*, 296, 100734. ❖
- (61) Peper J., Kownatzki-Danger D., Weninger G., Seibertz F., Pronto J.R.D., Sutanto H., Pacheu-Grau D., Hindmarsh R., Brandenburg S., Kohl T., Hasenfuss G., Gotthardt M., Rog-Zielinska E.A., Wollnik B., Rehling P., **Urlaub H.**, Wegener J., Heijman J., Voigt N., Cyganek L., **Lenz C.** and Lehnart S.E. (2021) Caveolin3 Stabilizes McT1-Mediated Lactate/Proton Transport in Cardiomyocytes. *Circ Res*, 128, e102-e120. ❖
- (62) Popova B., Galka D., Haffner N., Wang D., **Schmitt K.**, **Valerius O.**, Knop M. and Braus G.H. (2021) alpha-Synuclein Decreases the Abundance of Proteasome Subunits and Alters Ubiquitin Conjugates in Yeast. *Cells*, 10, 2229. ❖
- (63) Pyc M., Gidda S.K., Seay D., Esnay N., Kretzschmar F.K., Cai Y., Doner N.M., Greer M.S., Hull J.J., Coulon D., Bréhélin C., Yurchenko O., de Vries J., **Valerius O.**, Braus G.H., Ischebeck T., Chapman K.D., Dyer J.M. and Mullen R.T. (2021) LDIP cooperates with SEIPIN and LDAP to facilitate lipid droplet biogenesis in Arabidopsis. *Plant Cell*, 33, 3076-3103.

- (64) Resemann H.C., Herrfurth C., **Feussner K.**, Hornung E., Ostendorf A.K., Gömann J., Mittag J., van Gessel N., Vries J., Ludwig-Müller J., Markham J., Reski R. and Feussner I. (2021) Convergence of sphingolipid desaturation across over 500 million years of plant evolution. *Nat Plants*, 7, 219-232. ❖
- (65) Richter A., Fichtner A., Joost J., Brockmeyer P., Kauffmann P., Schliephake H., Hammerstein-Equord A., Kueffer S., **Urlaub H.**, Oellerich T., Ströbel P., Bohnenberger H. and Bremmer F. (2021) Quantitative proteomics identifies biomarkers to distinguish pulmonary from head and neck squamous cell carcinomas by immunohistochemistry. *J Pathol Clin Res*, 8, 33-47. ❖
- (66) Rinke S., Zuck T., Hausdörfer T., **Leha A.**, Wassmann T. and Ziebolz D. (2021) Prospective clinical evaluation of chairside-fabricated zirconia-reinforced lithium silicate ceramic partial crowns-5-year results. *Clin Oral Investig*, 26, 1593-1603. ❖
- (67) Rozanova S., Barkovits K., Nikolov M., Schmidt C., **Urlaub H.** and Marcus K. (2021) Quantitative Mass Spectrometry-Based Proteomics: An Overview. *Methods Mol Biol*, 2228, 85-116.
- (68) Schlotzig V., Kornrumpf K., König A., Tucholski T., Hügel J., Overbeck T.R., **Beissbarth T.**, Koch R. and Dönitz J. (2021) Predicting the Effect of Variants of Unknown Significance in Molecular Tumor Boards with the VUS-Predict Pipeline. *Stud Health Technol Inform*, 283, 209-216. ❖
- (69) **Schmitt K.**, Kraft A.A. and **Valerius O.** (2021) A Multi-Perspective Proximity View on the Dynamic Head Region of the Ribosomal 40S Subunit. *Int J Mol Sci*, 22, 11653. ❖
- (70) Schneider K., Farr T., Pinter N., **Schmitt K.**, **Valerius O.**, Braus G.H. and Kämper J. (2021) The Nma1 protein promotes long distance transport mediated by early endosomes in *Ustilago maydis*. *Mol Microbiol*, 117, 334-352.
- (71) Schnelle M., **Leha A.**, Eidizadeh A., Fuhlrott K., Trippel T.D., Hashemi D., Toischer K., Wachter R., Herrmann-Lingen C., Hasenfuss G., Pieske B., Binder L. and Edelmann F. (2021) Plasma Biomarker Profiling in Heart Failure Patients with Preserved Ejection Fraction before and after Spironolactone Treatment: Results from the Aldo-DHF Trial. *Cells*, 10, 2796. ❖
- (72) Serin N., Dihazi G.H., Tayyeb A., **Lenz C.**, Müller G.A., Zeisberg M. and **Dihazi H.** (2021) Calreticulin Deficiency Disturbs Ribosome Biogenesis and Results in Retardation in Embryonic Kidney Development. *Int J Mol Sci*, 22, 5858. ❖
- (73) Shaikhqasem A., **Schmitt K.**, **Valerius O.** and Ficner R. (2021) Crystal structure of human CRM1, covalently modified by 2-mercaptoethanol on Cys528, in complex with RanGTP. *Acta Crystallogr F Struct Biol Commun*, 77, 70-78. ❖
- (74) Siems S.B., **Jahn O.**, Hoodless L.J., Jung R.B., Hesse D., Möbius W., Czopka T. and Werner H.B. (2021) Proteome profile of myelin in the zebrafish brain. *Front Cell Dev Biol*, 9, 640169. ❖
- (75) Sievers K., Welp L., **Urlaub H.** and Ficner R. (2021) Structural and functional insights into human tRNA guanine transglycosylase. *RNA Biol*, 18, 382-396. ❖
- (76) Silbern I., Fang P., Ji Y., **Lenz C.**, **Urlaub H.** and Pan K.T. (2021) Relative Quantification of Phosphorylated and Glycosylated Peptides from the Same Sample Using Isobaric Chemical Labelling with a Two-Step Enrichment Strategy. *Methods Mol Biol*, 2228, 185-203. ❖
- (77) Silbern I., Pan K.T., Fiosins M., Bonn S., Rizzoli S.O., Fornasiero E.F., **Urlaub H.** and Jahn R. (2021) Protein Phosphorylation in Depolarized Synaptosomes: Dissecting Primary Effects of Calcium from Synaptic Vesicle Cycling. *Mol Cell Proteomics*, 20, 100061. ❖

- (78) Szczeniak, P., Henke T., Fröhlich S., Plessmann U., **Urlaub H.**, Leng L., Bucala R., Grosse R., Meinhardt A. and Klug J. (2021) Extracellular MIF, but not its homologue D-DT, promotes fibroblast motility independently of its receptor complex CD74/CD44. *J Cell Sci*, 134.
- (79) Valpadashi A., Callegari S., Linden A., Neumann P., Ficner R., **Urlaub H.**, Deckers M. and Rehling P. (2021) Defining the architecture of the human TIM22 complex by chemical crosslinking. *FEBS Lett*, 595, 157-168. ❖
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