**Weiner J**, Suwalski P, **Holtgrewe M**, Rakitko A, Thibeault C, Müller M, Patriki D, Quedenau C, Krüger U, Ilinsky V, Popov I, Balnis J, Jaitovich A, Helbig E, Lippert L, Stubbemann P, Real L, Macías J, Pineda J, Fernandez-Fuertes M, Wang X, Karadeniz Z, Saccomanno J, Doehn J, Hübner R, Hinzmann B, Salvo M, Blueher A, Siemann S, Jurisic S, Beer J, Rutishauser J, Wiggli B, Schmid H, Danninger K, Binder R, Corman V, Mühlemann B, Arjun AR, Fragiadakis G, Mick E, Comet C, Calfee C, Erle D, Hendrickson C, Kangelaris K, Krummel M, Woodruff P, Langelier C, Venkataramani U, García F, Zyla J, Drosten C, Alice B, Jones T, Suttorp N, Witzenrath M, Hippenstiel S, Zemojtel T, Skurk C, Poller W, Borodina T, Pa-Covid S, Ripke S, Sander L, **Beule D**, Landmesser U, Guettouche T, Kurth F, Heidecker B (2021). “Increased risk of severe clinical course of COVID-19 in carriers of HLA-C*04:01.” EClinicalMedicine,* 40\*, 101099. doi:10.1016/j.eclinm.2021.101099 [Link](https://doi.org/10.1016/j.eclinm.2021.101099)

Domaszewska T, Zyla J, Otto R, Kaufmann S, **Weiner J** (2021). “Gene Set Enrichment Analysis Reveals Individual Variability in Host Responses in Tuberculosis Patients.” *Front Immunol*, *12*, 694680. doi:10.3389/fimmu.2021.694680 [Link](https://doi.org/10.3389/fimmu.2021.694680)

Nouailles G, Wyler E, Pennitz P, Postmus D (2021). “Single-cell-sequencing in SARS-COV-2-infected hamsters sheds light on endothelial cell involvement in COVID-19.” *European Respiratory Journal*. doi:10.1183/13993003.congress-2021.PA2355 [Link](https://erj.ersjournals.com/content/58/suppl_65/PA2355.abstract)

Bischoff P, Trinks A, **Obermayer B**, **Pett J**, Wiederspahn J, Uhlitz F, Liang X, Lehmann A, Jurmeister P, Elsner A, Dziodzio T, Rückert J, Neudecker J, Falk C, **Beule D**, Sers C, Morkel M, Horst D, Blüthgen N, Klauschen F (2021). “Single-cell RNA sequencing reveals distinct tumor microenvironmental patterns in lung adenocarcinoma.” *Oncogene*, *40*, 6748-6758. doi:10.1038/s41388-021-02054-3 [Link](https://doi.org/10.1038/s41388-021-02054-3)

Uhlitz F, Bischoff P, Peidli S, Sieber A, Trinks A, Lüthen M, **Obermayer B**, **Blanc E**, Ruchiy Y, Sell T, Mamlouk S, Arsie R, Wei T, Klotz-Noack K, Schwarz R, Sawitzki B, Kamphues C, **Beule D**, Landthaler M, Sers C, Horst D, Blüthgen N, Morkel M (2021). “Mitogen-activated protein kinase activity drives cell trajectories in colorectal cancer.” *EMBO Mol Med*, *13*, e14123. doi:10.15252/emmm.202114123 [Link](https://doi.org/10.15252/emmm.202114123)

Nouailles G, Wyler E, Pennitz P, Postmus D, Vladimirova D, Kazmierski J, Pott F, Dietert K, Muelleder M, Farztdinov V, **Obermayer B**, Wienhold S, Andreotti S, Hoefler T, Sawitzki B, Drosten C, Sander L, Suttorp N, Ralser M, **Beule D**, Gruber A, Goffinet C, Landthaler M, Trimpert J, Witzenrath M (2021). “Temporal omics analysis in Syrian hamsters unravel cellular effector responses to moderate COVID-19.” *Nat Commun*, *12*, 4869. doi:10.1038/s41467-021-25030-7 [Link](https://doi.org/10.1038/s41467-021-25030-7)

Paterson S, Kar S, Ung S, Gardener Z, Bergstrom E, Ascough S, Kalyan M, Zyla J, Maertzdorf J, Mollenkopf H, **Weiner J**, Jozwik A, Jarvis H, Jha A, Nicholson B, Veldman T, Woods C, Mallia P, Kon O, Kaufmann S, Openshaw P, Chiu C (2021). “Innate-like Gene Expression of Lung-Resident Memory CD8(+) T Cells during Experimental Human Influenza: A Clinical Study.” *Am J Respir Crit Care Med*, *204*, 826-841. doi:10.1164/rccm.202103-0620OC [Link](https://doi.org/10.1164/rccm.202103-0620OC)

Rajasekaran S, Siddiqui J, Rakijas J, Nicolay B, Lin C, Khan E, Patel R, Morris R, Wyler E, Boukhali M, Balasubramanyam J, Ranjith KR, Van RC, Vogel C, Elchuri S, Landthaler M, **Obermayer B**, Haas W, Dyson N, Miles W (2021). “Integrated multi-omics analysis of RB-loss identifies widespread cellular programming and synthetic weaknesses.” *Commun Biol*, *4*, 977. doi:10.1038/s42003-021-02495-2 [Link](https://doi.org/10.1038/s42003-021-02495-2)

Schinke C, Fernandez VV, **Ivanov A**, Peng Y, Körtvelyessy P, Nolte L, Huehnchen P, **Beule D**, Stachelscheid H, Boehmerle W, Endres M (2021). “Modeling chemotherapy induced neurotoxicity with human induced pluripotent stem cell (iPSC) -derived sensory neurons.” *Neurobiol Dis*, *155*, 105391. doi:10.1016/j.nbd.2021.105391 [Link](https://doi.org/10.1016/j.nbd.2021.105391)

Pei G, Zyla J, He L, Moura-Alves P, Steinle H, Saikali P, Lozza L, Nieuwenhuizen N, **Weiner J**, Mollenkopf H, Ellwanger K, Arnold C, Duan M, Dagil Y, Pashenkov M, Boneca I, Kufer T, Dorhoi A, Kaufmann S (2021). “Cellular stress promotes NOD1/2-dependent inflammation via the endogenous metabolite sphingosine-1-phosphate.” *EMBO J*, *40*, e106272. doi:10.15252/embj.2020106272 [Link](https://doi.org/10.15252/embj.2020106272)

Herda S, Heimann A, **Obermayer B**, Ciraolo E, Althoff S, Ruß J, Grunert C, Busse A, Bullinger L, Pezzutto A, Blankenstein T, **Beule D**, Na I (2021). “Long-term in vitro expansion ensures increased yield of central memory T cells as perspective for manufacturing challenges.” *Int J Cancer*, *148*, 3097-3110. doi:10.1002/ijc.33523 [Link](https://doi.org/10.1002/ijc.33523)

Kraushar M, Krupp F, Harnett D, Turko P, Ambrozkiewicz M, Sprink T, Imami K, Günnigmann M, Zinnall U, Vieira-Vieira C, Schaub T, Münster-Wandowski A, Bürger J, Borisova E, Yamamoto H, Rasin M, Ohler U, **Beule D**, Mielke T, Tarabykin V, Landthaler M, Kramer G, Vida I, Selbach M, Spahn C (2021). “Protein Synthesis in the Developing Neocortex at Near-Atomic Resolution Reveals Ebp1-Mediated Neuronal Proteostasis at the 60S Tunnel Exit.” *Mol Cell*, *81*, 304-322.e16. doi:10.1016/j.molcel.2020.11.037 [Link](https://doi.org/10.1016/j.molcel.2020.11.037)

Heyckendorf J, Marwitz S, Reimann M, Avsar K, DiNardo A, Günther G, Hoelscher M, Ibraim E, Kalsdorf B, Kaufmann S, Kontsevaya I, van LF, Mandalakas A, Maurer F, Müller M, Nitschkowski D, Olaru I, Popa C, Rachow A, Rolling T, Rybniker J, Salzer H, Sanchez-Carballo P, Schuhmann M, Schaub D, Spinu V, Suárez I, Terhalle E, Unnewehr M, **Weiner J**3, Goldmann T, Lange C (2021). “Prediction of anti-tuberculosis treatment duration based on a 22-gene transcriptomic model.” *Eur Respir J*, *58*. doi:10.1183/13993003.03492-2020 [Link](https://doi.org/10.1183/13993003.03492-2020)

Bao X, **Weiner J**3, Meckes O, Dommisch H, Schaefer A (2021). “Entamoeba gingivalis Exerts Severe Pathogenic Effects on the Oral Mucosa.” *J Dent Res*, *100*, 771-776. doi:10.1177/00220345211004498 [Link](https://doi.org/10.1177/00220345211004498)

Eckold C, Kumar V, **Weiner J**, Alisjahbana B, Riza A, Ronacher K, Coronel J, Kerry-Barnard S, Malherbe S, Kleynhans L, Stanley K, Ruslami R, Ioana M, Ugarte-Gil C, Walzl G, van CR, Wijmenga C, Critchley J, Dockrell H, Cliff J, TANDEM c (2021). “Impact of Intermediate Hyperglycemia and Diabetes on Immune Dysfunction in Tuberculosis.” *Clin Infect Dis*, *72*, 69-78. doi:10.1093/cid/ciaa751 [Link](https://doi.org/10.1093/cid/ciaa751)

Wyler E, Mösbauer K, Franke V, Diag A, Gottula L, Arsiè R, Klironomos F, Koppstein D, Hönzke K, Ayoub S, Buccitelli C, Hoffmann K, Richter A, Legnini I, **Ivanov A**, Mari T, Del GS, Papies J, Praktiknjo S, Meyer T, Müller M, Niemeyer D, Hocke A, Selbach M, Akalin A, Rajewsky N, Drosten C, Landthaler M (2021). “Transcriptomic profiling of SARS-CoV-2 infected human cell lines identifies HSP90 as target for COVID-19 therapy.” *iScience*, *24*, 102151. doi:10.1016/j.isci.2021.102151 [Link](https://doi.org/10.1016/j.isci.2021.102151)

Mölder F, Jablonski K, Letcher B, Hall M, Tomkins-Tinch C, Sochat V, Forster J, Lee S, Twardziok S, Kanitz A, Wilm A, **Holtgrewe M**, Rahmann S, Nahnsen S, Köster J (2021). “Sustainable data analysis with Snakemake.” *F1000Res*, *10*, 33. doi:10.12688/f1000research.29032.2 [Link](https://doi.org/10.12688/f1000research.29032.2)

**Messerschmidt C**, Foddis M, Blumenau S, Müller S, **Bentele K**, **Holtgrewe M**, Kun-Rodrigues C, Alonso I, do CMM, Morgadinho A, Velon A, Santo G, Santana I, Mönkäre S, Kuuluvainen L, Schleutker J, Pöyhönen M, Myllykangas L, Senatore A, Berchtold D, Winek K, Meisel A, Pavlovic A, Kostic V, Dobricic V, Lohmann E, Hanagasi H, Guven G, Bilgic B, Bras J, Guerreiro R, **Beule D**, Dirnagl U, Sassi C (2021). “PHACTR1 genetic variability is not critical in small vessel ischemic disease patients and PcomA recruitment in C57BL/6J mice.” *Sci Rep*, *11*(1), 6072. doi:10.1038/s41598-021-84919-x [Link](https://doi.org/10.1038/s41598-021-84919-x)

Zarate Y, Uehara T, Abe K, Oginuma M, Harako S, Ishitani S, Lehesjoki A, Bierhals T, Kloth K, Ehmke N, Horn D, **Holtgrewe M**, Anderson K, Viskochil D, Edgar-Zarate C, Sacoto M, Schnur R, Morrow M, Sanchez-Valle A, Pappas J, Rabin R, Muona M, Anttonen A, Platzer K, Luppe J, Gburek-Augustat J, Kaname T, Okamoto N, Mizuno S, Kaido Y, Ohkuma Y, Hirose Y, Ishitani T, Kosaki K (2021). “CDK19-related disorder results from both loss-of-function and gain-of-function de novo missense variants.” *Genet Med*, *23*(6), 1050-1057. doi:10.1038/s41436-020-01091-9 [Link](https://doi.org/10.1038/s41436-020-01091-9)

Vogt G, El CN, Herczegfalvi Á, Kölbel H, Lekaj A, Schara U, **Holtgrewe M**, Krause S, Horvath R, Schuelke M, Hübner C, Mundlos S, Roos A, Lochmüller H, Karcagi V, Kornak U, Fischer-Zirnsak B (2021). “Expanding the clinical and molecular spectrum of ATP6V1A related metabolic cutis laxa.” *J Inherit Metab Dis*, *44*(4), 972-986. doi:10.1002/jimd.12341 [Link](https://doi.org/10.1002/jimd.12341)

Yildirim F, Foddis M, Blumenau S, Müller S, Kajetan B, **Holtgrewe M**, Kola V, **Beule D**, Sassi C (2021). “Shared and oppositely regulated transcriptomic signatures in Huntington’s disease and brain ischemia confirm known and unveil novel potential neuroprotective genes.” *Neurobiol Aging*, *104*, 122.e1-122.e17. doi:10.1016/j.neurobiolaging.2021.03.001 [Link](https://doi.org/10.1016/j.neurobiolaging.2021.03.001)

Elsner J, Mensah M, **Holtgrewe M**, Hertzberg J, Bigoni S, Busche A, Coutelier M, de SD, Elçioglu N, Filges I, Gerkes E, Girisha K, Graul-Neumann L, Jamsheer A, Krawitz P, Kurth I, Markus S, Megarbane A, Reis A, Reuter M, Svoboda D, Teller C, Tuysuz B, Türkmen S, Wilson M, Woitschach R, Vater I, Caliebe A, Hülsemann W, Horn D, Mundlos S, Spielmann M (2021). “Genome sequencing in families with congenital limb malformations.” *Hum Genet*, *140*(8), 1229-1239. doi:10.1007/s00439-021-02295-y [Link](https://doi.org/10.1007/s00439-021-02295-y)

Seidel F, **Holtgrewe M**, Al-Wakeel-Marquard N, Opgen-Rhein B, Dartsch J, Herbst C, **Beule D**, Pickardt T, Klingel K, Messroghli D, Berger F, Schubert S, Kühnisch J, Klaassen S (2021). “Pathogenic Variants Associated With Dilated Cardiomyopathy Predict Outcome in Pediatric Myocarditis.” *Circ Genom Precis Med*, *14*(4), e003250. doi:10.1161/CIRCGEN.120.003250 [Link](https://doi.org/10.1161/CIRCGEN.120.003250)

Melo U, Piard J, Fischer-Zirnsak B, Klever M, Schöpflin R, Mensah M, **Holtgrewe M**, Arbez-Gindre F, Martin A, Guigue V, Gaillard D, Landais E, Roze V, Kremer V, Ramanah R, Cabrol C, Harms F, Kornak U, Spielmann M, Mundlos S, Van ML (2021). “Complete lung agenesis caused by complex genomic rearrangements with neo-TAD formation at the SHH locus.” *Hum Genet*, *140*(10), 1459-1469. doi:10.1007/s00439-021-02344-6 [Link](https://doi.org/10.1007/s00439-021-02344-6)

Sczakiel H, Hülsemann W, **Holtgrewe M**, Abad-Perez A, Elsner J, Schwartzmann S, Horn D, Spielmann M, Mundlos S, Mensah M (2021). “GLI3 variants causing isolated polysyndactyly are not restricted to the protein’s C-terminal third.” *Clin Genet*, *100*(6), 758-765. doi:10.1111/cge.14059 [Link](https://doi.org/10.1111/cge.14059)