

List of published preliminary research relevant to the research program

Krüger, Elke

Peer-reviewed Publications (selection)

1. de Jesus AA, Brehm A, VanTries R, Pillet P, Parentelli AS, Montealegre Sanchez GA, Deng Z, Paut IK, Goldbach-Mansky R, **Krüger E**. 2019. Novel proteasome assembly chaperone mutations in PSMG2/PAC2 cause the autoinflammatory interferonopathy CANDLE/PRAAS4. *J Allergy Clin Immunol* 143:1939-1943.e8
2. Poli MC, Ebstein F, Nicholas SK, de Guzman MM, Forbes LR, Chinn IK, Mace EM, Vogel TP, Carisey AF, Benavides F, Coban-Akdemir ZH, Gibbs RA, Jhangiani SN, Muzny DM, Carvalho CMB, Schady DA, Jain M, Rosenfeld JA, Emrick L, Lewis RA, Lee B; Undiagnosed Diseases Network members, Zieba BA, Küry S, **Krüger E**, Lupski JR, Bostwick BL, Orange JS. 2018. Heterozygous Truncating Variants in POMP Escape Nonsense-Mediated Decay and Cause a Unique Immune Dysregulatory Syndrome. *Am J Hum Genet* 102:1126-1142
3. Taubert RM, Haberecht S, Venz S, **Krüger E**. 2018. Inhibition of calpain-1 stabilizes TCF11/Nrf1 but does not affect its activation in response to proteasome inhibition. *Biosci Rep* 38(5). pii:BSR20180393
4. Wagner LK, Gilling KE, Schormann E, Kloetzel PM, Heppner FL*, **Krüger E***, Prokop S. 2017. Immunoproteasome deficiency alters microglial cytokine response and improves cognitive deficits in Alzheimer's disease-like APPPS1 mice. *Acta Neuropathol Commun* 5:52. *equal contribution, corresponding authors
5. Sotzny F, Schormann E, Kühlewindt I, Koch A, Brehm A, Goldbach-Mansky R, Gilling KE, **Krüger E**. 2016. TCF11/Nrf1-Mediated Induction of Proteasome Expression Prevents Cytotoxicity by Rotenone. *Antioxid Redox Signal* 25:870-885
6. Brehm A, Liu Y, Sheikh A, Marrero B, Omoyinmi E, Zhou Q, Montealegre G, Biancotto A, Reinhardt A, Almeida de Jesus A, Pelletier M, Tsai WL, Remmers EF, Kardava L, Hill S, Kim H, Lachmann HJ, Megarbane A, Chae JJ, Brady J, Castillo RD, Brown D, Casano AV, Gao L, Chapelle D, Huang Y, Stone D, Chen Y, Sotzny F, Lee C-CR, Kastner DL, Torrelo A, Zlotogorski A, Moir S, Gadina M, McCoy P, Wesley R, Rother K, Hildebrand PW, Brogan P, **Krüger E***, Aksentijevich I, Goldbach-Mansky R*. 2015. Additive loss-of-function proteasome subunit mutations in CANDLE/PRAAS patients promote type I IFN production. *J Clin Invest* 125:4196-41211. *corresponding authors, equal contribution
7. Brehm A, **Krüger E**. 2015. Dysfunction in protein clearance by the proteasome: impact on autoinflammatory diseases. *Semin Immunopathol* 37:323-333
8. **Krüger E**, Kloetzel P-M. 2012. Immunoproteasomes at the interface of innate and adaptive immune responses: two faces of one enzyme. *Curr Opin Immunol* 24:77-83 (Review)
9. **Seifert U**, Bialy LP, Ebstein F, Bech-Otschir D, Voigt A, Schroeter F, Prozorovski T, Lange N, Steffen J, Rieger M, Kuckelkorn U, Aktas O, Kloetzel P-M, **Krüger E**. 2010. Immunoproteasomes preserve protein homeostasis upon interferon-induced oxidative stress. *Cell* 142:613-624
10. Steffen J, Seeger M, Koch A, **Krüger E**. 2010. Proteasomal degradation is transcriptionally controlled by TCF11 via an ERAD-dependent feedback loop. *Mol Cell* 40:147-158