

Dr. Erik Klapproth
Academic Staff
Institute of Pharmacology and Toxicology
Email: erik.klapproth@tu-dresden.de

Employment

Academic Staff

Institute of Pharmacology and Toxicology
Technische Universität Dresden
Dresden, Germany
28 Jan 2022 → present

Research outputs

Investigation of mesalazine as an antifibrotic drug following myocardial infarction in male mice

Künzel, S. R., Winter, L., Hoffmann, M., Kant, T. A., Thiel, J., Kronstein-Wiedemann, R., Klapproth, E., & 3 others Lorenz, K., El-Armouche, A. & Kämmerer, S., Sept 2023, In: *Physiological reports*. 11, 17, e15809.

CNP Promotes Antiarrhythmic Effects via Phosphodiesterase 2

Cachorro, E., Günscht, M., Schubert, M., Sadek, M. S., Siegert, J., Dutt, F., Bauermeister, C., & 18 others Quickert, S., Berning, H., Nowakowski, F., Lämmle, S., Firneburg, R., Luo, X., Künzel, S. R., Klapproth, E., Mirtschink, P., Mayr, M., Dewenter, M., Vettel, C., Heijman, J., Lorenz, K., Guan, K., El-Armouche, A., Wagner, M. & Kämmerer, S., 17 Feb 2023, In: *Circulation research*. 132 (2023), 4, p. 400-414 15 p.

Targeting cardiomyocyte ADAM10 ectodomain shedding promotes survival early after myocardial infarction

Klapproth, E., Witt, A., Klose, P., Wiedemann, J., Vavilthota, N., Künzel, S. R., Kämmerer, S., & 15 others Günscht, M., Sprott, D., Lesche, M., Rost, F., Dahl, A., Rauch, E., Kattner, L., Weber, S., Mirtschink, P., Kopalani, I., Guan, K., Lorenz, K., Saftig, P., Wagner, M. & El-Armouche, A., Dec 2022, In: *Nature communications*. 13, 1, 7648.

Function and regulation of phosphatase 1 in healthy and diseased heart

Klapproth, E., Kämmerer, S. & El-Armouche, A., Feb 2022, In: *Cellular signalling*. 90, p. 110203

Diminished PLK2 Induces Cardiac Fibrosis and Promotes Atrial Fibrillation

Künzel, S. R., Hoffmann, M., Weber, S., Künzel, K., Kämmerer, S., Günscht, M., Klapproth, E., & 25 others Rausch, J. S. E., Sadek, M. S., Kolanowski, T., Meyer-Roxlau, S., Piorkowski, C., Tugtekin, S. M., Rose-John, S., Yin, X., Mayr, M., Kuhlmann, J. D., Wimberger, P., Grützmann, K., Herzog, N., Küpper, J.-H., O'Reilly, M., Kabir, S. N., Sommerfeld, L. C., Guan, K., Wielockx, B., Fabritz, L., Nattel, S., Ravens, U., Dobrev, D., Wagner, M. & El-Armouche, A., Oct 2021, In: *Circulation research*.

Systemic mesalazine treatment prevents spontaneous skin fibrosis in PLK2-deficient mice

Newe, M., Kant, T. A., Hoffmann, M., Rausch, J. S. E., Winter, L., Künzel, K., Klapproth, E., & 2 others Günther, C. & Künzel, S. R., Aug 2021, In: *Naunyn-Schmiedeberg's archives of pharmacology*.

The influence of ve-cadherin on adhesion and incorporation of breast cancer cells into vascular endothelium

Brock, T., Boudriot, E., Klawitter, A., Großner, M., Nguyen, T. T. P., Giebe, S., Klapproth, E., & 3 others Temme, A., El-armouche, A. & Breier, G., 1 Jun 2021, In: *International journal of molecular sciences*. 22, 11, 6049.

Cellular mechanisms of the anti-arrhythmic effect of cardiac pde2 overexpression

Wagner, M., Sadek, M. S., Dybkova, N., Mason, F. E., Klehr, J., Firneburg, R., Cachorro, E., & 9 others Richter, K., Klapproth, E., Kuenzel, S. R., Lorenz, K., Heijman, J., Dobrev, D., El-Armouche, A., Sossalla, S. & Kämmerer, S., 1 May 2021, In: *International journal of molecular sciences*. 22, 9, 4816.

Genetic Deletion of Polo-Like Kinase 2 Induces a Pro-Fibrotic Pulmonary Phenotype

Kant, T. A., Newe, M., Winter, L., Hoffmann, M., Kämmerer, S., Klapproth, E., Künzel, K., & 4 others Kühnel, M. P., Neubert, L., El-Armouche, A. & Künzel, S. R., 11 Mar 2021, In: *Cells*.

Repurposing mesalazine against cardiac fibrosis in vitro

Hoffmann, M., Kant, T. A., Emig, R., Rausch, J. S. E., Neue, M., Schubert, M., Künzel, K., & 6 others Winter, L., Klapproth, E., Peyronnet, R., Ravens, U., El-Armouche, A. & Künzel, S. R., Oct 2020, In: Naunyn-Schmiedeberg's archives of pharmacology.

Modeling atrial fibrosis in vitro —Generation and characterization of a novel human atrial fibroblast cell line

Künzel, S. R., Rausch, J. S. E., Schäffer, C., Hoffmann, M., Künzel, K., Klapproth, E., Kant, T., & 9 others Herzog, N., Küpper, JH., Lorenz, K., Dudek, S., Emig, R., Ravens, U., Rog-Zielinska, E. A., Peyronnet, R. & El-Armouche, A., 2 Jul 2020, In: FEBS open bio.

Interaction of Discoidin Domain Receptor 1 with a 14-3-3-Beclin-1-Akt1 Complex Modulates Glioblastoma Therapy Sensitivity

Vehlow, A., Klapproth, E., Jin, S., Hannen, R., Hauswald, M., Bartsch, J. W., Nimsky, C., & 3 others Temme, A., Leitinger, B. & Cordes, N., 26 Mar 2019, In: Cell reports. 26, 13, p. 3672-3683.e7

Whole exome sequencing identifies mTOR and KEAP1 as potential targets for radiosensitization of HNSCC cells refractory to EGFR and β 1 integrin inhibition

Klapproth, E., Dickreuter, E., Zakrzewski, F., Seifert, M., Petzold, A., Dahl, A., Schröck, E., & 2 others Klink, B. & Cordes, N., 1 Apr 2018, In: Oncotarget. 9, 26, p. 18099-18114 16 p.

Towards targeting anticancer drugs: ruthenium(ii)-arene complexes with biologically active naphthoquinone-derived ligand systems.

Kubanik, M., Kandioller, W., Kim, K., Anderson, R., Klapproth, E., Jakupec, M., Roller, A., & 3 others Soehnel, T., Keppler, B. & Hartinger, C., 1 Aug 2016, In: Dalton transactions : a journal of inorganic chemistry, including bioinorganic, organometallic, and solid-state chemistry .

Three-dimensional and co-culture models for preclinical evaluation of metal-based anticancer drugs.

Schreiber-Brynzak, E., Klapproth, E., Unger, C., Lichtscheidl-Schulz, I., Göschel, S., Schweighofer, S., Trondl, R., & 3 others Dolznig, H., Jakupec, M. & Keppler, B., 21 Jun 2015, In: Investigational new drugs.

Copper(II) complexes with highly water-soluble L- and D-proline-thiosemicarbazone conjugates as potential inhibitors of Topoisomerase II α .

Bacher, F., Enyedy, E., Rockenbauer, A., Bogнар, G., Trondl, R., Novak, M., Klapproth, E., & 2 others Kiss, T. & Arion, V., 5 Jul 2013, In: Inorganic chemistry.

Prizes

Best Paper of the year award

Klapproth, Erik (Recipient), 2019

Förderung durch die Deutsche Gesellschaft für Herzforschung

Klapproth, Erik (Recipient), 2019

Forschungstipendium der Deutschen Gesellschaft für Kardiologie – Herz- und Kreislaufforschung e.V.

Klapproth, Erik (Recipient), 2021

Franz-Loogen-Abstract-Preis

Klapproth, Erik (Recipient), 2021

Hans-Jürgen-Bretschneider Posterpreis der DGK Herztage 2019

Klapproth, Erik (Recipient), 2019

Hans-Jürgen-Bretschneider Posterpreis der DGK Herztage 2023

Klapproth, Erik (Recipient), 2023

Rudolf-Buchheim-Preis 2022

Klapproth, Erik (Recipient), 2023