

List of publications

A) Research articles

1. L. Miek, P.M. Jordan, K. Günther, S. Pace, T. Beyer, D. Kowalak, **V. Hoerr**, B. Löffler, L. Tuchscher, C.N. Serhan, J. Gerstmeier, O. Werz. Staphylococcus aureus controls eicosanoid and specialized pro-resolving mediator production via lipoteichoic acid. *Immunology*. 2022 Feb 10.
2. A. Nahardani, S. Leistikow, K. Grün, M. Krämer, K.H. Herrmann, A. Schrepper, C. Jung, S. Moradi, P.C. Schulze, L. Linsen, J.R. Reichenbach, **V. Hoerr***, Franz M*. Pulmonary Arteriovenous Pressure Gradient and Time-Averaged Mean Velocity of Small Pulmonary Arteries Can Serve as Sensitive Biomarkers in the Diagnosis of Pulmonary Arterial Hypertension: A Preclinical Study by 4D-Flow MRI. *Diagnostics (Basel)*. 12(1):58, 2022. *equally contributed.
3. C. Schwarz, R. Buchholz, M. Jawad, V. Hoesker, C. Terwesten-Solé, U. Karst, L Linsen, T. Vogl, **V. Hoerr**, M. Wildgruber, C. Faber. Fingerprints of Element Concentrations in Infective Endocarditis Obtained by Mass Spectrometric Imaging and t-Distributed Stochastic Neighbor Embedding. *ACS Infect Dis*. 8(2):360-372, 2022.
4. C. Schwarz, Y. Töre, V. Hoesker, S. Ameling, K. Grün, U. Völker, P.C. Schulze, M. Franz, C. Faber, F. Schaumburg, S. Niemann, **V. Hoerr**. Host-pathogen interactions of clinical *S. aureus* isolates to induce infective endocarditis. *Virulence*. 12(1):2073-2087, 2021.
5. N. Schmitz, M. Timmen, K. Kostka, **V. Hoerr**, C. Schwarz, C. Faber, U. Hansen, R. Matthys, M.J. Raschke, R. Stange. A novel MRI compatible mouse fracture model to characterize and monitor bone regeneration and tissue composition. *Sci Rep*. 10(1):16238, 2020.
6. C. Schwarz, **V. Hoerr**, Y. Töre, V. Hoesker, U. Hansen, H. Van de Vyver, S. Niemann, M.T. Kuhlmann, A. Jeibmann, M. Wildgruber, C. Faber. Isolating Crucial Steps in Induction of Infective Endocarditis With Preclinical Modeling of Host Pathogen Interaction. *Front Microbiol*. 11:1325, 2020.
7. L. Tuchscher, C. Pöllath, A. Siegmund, S. Deinhardt-Emmer, **V. Hoerr**, C.M. Svensson, T.M. Figge, S. Monecke, B. Löffler. Clinical *S. aureus* isolates vary in their virulence to promote adaptation to the host. *Toxins (Basel)*. 11(3), 2019.
8. I. Gallitz, N. Lofruthe, L. Traeger, N. Bäumer, **V. Hoerr**, C. Faber, T. Kuhlmann, C. Müller-Tidow, A.U. Steinbicker. Deficiency of the BMP Type I receptor ALK3 partly protects mice from anemia of inflammation. *BMC Physiol*. 18(1):3, 2018.
9. D. Kentrup, P. Bovenkamp, A. Busch, K. Schuette-Nuetgen, H. Pawelski, H. Pavenstädt, E. Schlatter, K.H. Herrmann, J.R. Reichenbach, B. Löffler, B. Heitplatz, V. Van Marck, N.N. Yadav, G. Liu, P.C.M. van Zijl, S. Reuter, **V. Hoerr**. GlucoCEST magnetic resonance imaging in vivo may be diagnostic of acute renal allograft rejection. *Kidney Int*. 92:757-764, 2017.
10. D. Abdurrachim, M. Nabben, **V. Hoerr**, M.T. Kuhlmann, P. Bovenkamp, J. Ciapaite, I.M.E. Geraets, W. Coumans, J.J.F.P. Luiken, J.F.C. Glatz, M. Schäfers, K. Nicolay, C. Faber, S. Hermann, J.J. Prompers. Diabetic db/db mice do not develop heart failure upon pressure overload: a longitudinal in vivo PET, MRI, and MRS study on cardiac metabolic, structural, and functional adaptations. *Cardiovasc Res*. 113:1148-1160, 2017.
11. M. Krämer, A.G. Motaal, K.H. Herrmann, B. Löffler, J.R. Reichenbach, G.J. Strijkers, **V. Hoerr**. Cardiac 4D phase-contrast CMR at 9.4 T using self-gated ultra-short echo time (UTE) imaging. *J Cardiovasc Magn Reson*. 19:39-52, 2017.
12. H. Van de Vyver, P.R. Bovenkamp, **V. Hoerr**, K. Schwegmann, L. Tuchscher, S. Niemann, L. Kursawe, C. Grosse, A. Moter, U. Hansen, U. Neugebauer, M.T. Kuhlmann,

- G. Peters, S. Hermann, B. Löffler. A Novel Mouse Model of Staphylococcus aureus Vascular Graft Infection: Noninvasive Imaging of Biofilm Development in Vivo. *Am J Pathol.* 187:268-279, 2017.
13. **V. Hoerr**, G.E. Duggan, L. Zbytnuik, K.H. Poon, C. Große, U. Neugebauer, K. Methling, B. Löffler, H.J. Vogel. Characterization and prediction of the mechanism of action of antibiotics through NMR metabolomics. *BMC Microbiol.* 16:82-96, 2016.
 14. D. Tang, S. Tao, Z. Chen, L. Koliesnik, P.G. Calmes, **V. Hoerr**, B. Han, N. Gebert, M. Zörnig, B. Löffler, Y. Morita, K.L. Rudolph. Dietary restriction improves repopulation but impairs lymphoid differentiation capacity of hematopoietic stem cells in early aging. *J Exp Med.* 213:535-553, 2016.
 15. L. Tuchscher*^{*}, C.A. Kreis*^{*}, **V. Hoerr*^{*}**, L. Flint, M. Hachmeister, J. Geraci, S. Bremer-Streck, M. Kiehntopf, E. Medina, M. Kribus, M. Raschke, M. Pletz, G. Peters, B. Löffler. Staphylococcus aureus develops increased resistance to antibiotics by forming dynamic small colony variants during chronic osteomyelitis. *J Antimicrob Chemother.* 71:438-448, 2016. *equally contributed.
 16. L. Frohwein, **V. Hoerr**, C. Faber, K. Schäfers. Correction of MRI-induced Geometrics Distortions in Whole-Body Small Animal PET-MRI. *Med Phys.* 42:3848-3858, 2015.
 17. A. Motaal, N. Noorman, W.L. De Graaf, **V. Hoerr**, L.J. Florack, K. Nicolay, G.J. Strijkers. Imaging myocardial infarction using accelerated self-gated UTE cine MRI. *Int J Cardiovasc Imaging.* 31:83-94, 2015.
 18. P.R. Bovenkamp, T. Brix, F. Lindemann, R. Holtmeier, D. Abdurrachim, M.T. Kuhlmann, G.J. Strijkers, J. Stypmann, K.H. Hinrichs, **V. Hoerr**. Velocity mapping of the aortic flow at 9.4 T in healthy mice and mice with induced heart failure using time-resolved three-dimensional phase contrast MRI (4D PC MRI). *Magn Reson Mater Phy Biol Med.* 28:315-327, 2015.
 19. J. Ring, **V. Hoerr**, L. Tuchscher, M.T. Kuhlmann, B. Löffler, C. Faber. MRI visualization of *Staphylococcus aureus*-induced infective endocarditis in mice. *PLoS One.* 9:e107179, 2014.
 20. D.Z. Balla, S. Gottschalk, G. Shajan, S. Ueberberg, S. Schneider, M. Hardtke-Wolenski, E. Jaeckel, **V. Hoerr**, C. Faber, K. Scheffler, R. Pohmann, J. Engelmann. In vivo visualization of single native pancreatic islets in the mouse. *Contrast Media Mol Imaging.* 8:495-504, 2013.
 21. **V. Hoerr**, L. Tuchscher, J. Hueve, N. Nippe, N. Glyvuk, Y. Tsytsyura, M. Holtkamp, J. Klingauf, C. Sunderkötter, U. Karst, G. Peters, B. Löffler, C. Faber. Bacteria tracking by in vivo magnetic resonance imaging. *BMC Biology,* 11:63-75, 2013.
 22. **V. Hoerr**, N. Nagelmann, A. Nauerth, M.T. Kuhlmann, J. Stypmann, C. Faber. Cardiac-respiratory self-gated cine UTE MRI for assessment of functional cardiac parameters at high magnetic fields. *J Cardiovasc Magn Reson.* 15:59-67, 2013.
 23. **V. Hoerr**, L. Zbytnuik, C. Leger, P. Tam, P. Kubes, H.J. Vogel. Gram-negative and gram-positive bacterial infections give rise to a different metabolic response in a mouse model. *J Proteome Res.* 11:3231-3245, 2012.
 24. K. Strobel, **V. Hoerr**, F. Schmid, L. Wachsmuth, B. Löffler, C. Faber. Early detection of lung inflammation: Exploiting T1-effects of iron oxide particles using UTE MRI. *Magn Reson Med.* 68:1924-1931, 2012.
 25. S.A. Horst, **V. Hoerr**, A. Beineke, C. Kreis, L. Tuchscher, J. Kalinka, S. Lehne, I. Schleicher, T. Fuchs, M. Raschke, C. Faber, M. Rohde, G. Peters, B. Löffler, E. Medina. A novel mouse model of *Staphylococcus aureus* chronic osteomyelitis that closely mimics

- the human infection: An integrated view of disease pathogenesis. *Am J Pathol.* 181:1206-1214, 2012.
26. **V. Hoerr**, A. Porea, C. Faber. NMR separation of intra- and extracellular compounds based on intermolecular coherences. *Biophys J.* 99:2336-2343, 2010.
 27. V. Alptüzün, M. Prinz, **V. Hoerr**, J. Scheiber, K. Radacki, A. Fallarero, P. Vuorela, B. Engels, H. Braunschweig, E. Erciyas, U. Holzgrabe. Interaction of (benzylidenehydrazono)-1,4-dihydropyridines with beta-amyloid, acetylcholine, and butyrylcholine esterases. *Bioorg Med Chem.* 18:2049-2059, 2010.
 28. M. Muth, **V. Hoerr**, M. Glaser, A. Ponte-Sucré, H. Moll, A. Stich, U. Holzgrabe. Antitrypanosomal activity of quaternary naphthalimide derivatives. *Bioorg. Med Chem Lett.* 17:1590-1593, 2007.
 29. **V. Hoerr**, W. Ziebuhr, S. Kozitskaya, E. Katzowitsch, U. Holzgrabe. Laser-induced fluorescence capillary electrophoresis (LIF-CE) and fluorescence microplate reader (FMR) measurement: Two novel methods to quantify the effect of antibiotics. *Anal Chem.* 79:7510-7518, 2007.
→ referenced by: D. L. Shenkenberg in *Biophotonics International*, Dec. 2007, 57-58
 30. **V. Hoerr**, K. Hoffmann, C. Schollmayer, U. Holzgrabe, A. Haase, P. Jakob, C. Faber. Assessment of inhibitory potency of antibiotics by MRI: apparent T2 as a marker of cell growth. *Magn Reson Mater Phy Biol Med.* 19:247-255, 2006.
 31. R. Vicik, **V. Hoerr**, M. Glaser, M. Schultheis, E. Hansell, J.H. McKerrow, U. Holzgrabe, C.R. Caffrey, A. Ponte-Sucré, H. Moll, A. Stich, T. Schirmeister. Aziridine-2,3-dicarboxylate inhibitors targeting the major cysteine protease of *Trypanosoma brucei* as lead trypanocidal agents. *Bioorg Med Chem Lett.* 16:2753-2757, 2006.
 32. **V. Hoerr**, A. Stich, U. Holzgrabe. Critical aspects of analysis of *Micrococcus luteus*, *Neisseria cinerea* and *Pseudomonas fluorescens* by means of capillary electrophoresis. *Electrophoresis* 25:3132-3138, 2004.
 33. G. Bringmann, **V. Hoerr**, U. Holzgrabe, A. Stich. Antitrypanosomal naphthylisoquinoline alkaloids and related compounds. *Pharmazie* 58:343-346, 2003.

B) Review articles

1. R. Köhnke, D. Kentrup, K. Schütte-Nütgen, M. Schäfers, U. Schnöckel, **V. Hoerr**, S. Reuter. Update on imaging-based diagnosis of acute renal allograft rejection. *Am J Nucl Med Mol Imaging.* 9(2):110-126, 2019.
2. U. Jehn, K. Schuette-Nuetgen, D. Kentrup, **V. Hoerr**, S. Reuter. Renal Allograft Rejection: Noninvasive Ultrasound- and MRI-Based Diagnostics. *Contrast Media Mol Imaging.* 2019:3568067, 2019.
3. **V. Hoerr**, M. Franz, M.W. Pletz, M. Diab, S. Niemann, C. Faber, T. Doenst, P.C. Schulze, S. Deinhardt-Emmer, B. Löffler. *S. aureus* endocarditis: Clinical aspects and experimental approaches. *Int J Med Microbiol.* 308(6):640-652, 2018.
4. S. Deinhardt-Emmer, **V. Hoerr**, B. Löffler. Vascular graft infection: a new model for treatment management? *Future Microbiol.* 12:651-654, 2017.
5. **V. Hoerr**, C. Faber. Magnetic resonance imaging characterization of microbial infections. *J Pharm Biomed Anal.* 93:136-146, 2014.

C) Other publications

Book chapters and monographies

1. W. Hafezi, **V. Hoerr**. In vivo visualization of encephalitic lesions in herpes simplex virus type 1 (HSV-1) infected mice by MRI. *Methods in Molecular Biology*, Springer Protocols, 1064:253-265, 2013.
2. **V. Hoerr**, H.J. Vogel. *Metabolomics*. Encyclopedia of Biophysics, Springer-Verlag, Berlin, Heidelberg, Editor: Gordon C. K. Roberts, 2012.

Theses

1. **V. Hörr**. Magnetresonanz in der Diagnostik und präklinischen Forschung bakterieller Infektionen. Habilitationsschrift im Fach Experimentelle Radiologie, Jena, November 2016.
2. **V. Hörr**. Methoden zur Evaluation von Zytotoxizität und Struktur-Wirkungs-Beziehungen an *Trypanosoma brucei brucei*. Dissertation in Pharmazeutischer Chemie, Würzburg, Mai 2008.
3. **V. Hörr**. In-vivo-MR-Spektroskopie an Oozyten des *Xenopus laevis*. Diplomarbeit im Fach Physik, Würzburg, April 2008.

Patents

- WO 2004/067514 Bringmann G, Rummey C, Neumann S, Brun R, Stich A, **Hoerr V**, Müller W. 3,3-Dimethyl-8-Oxoisoquinolines for medical purposes, methods for the production thereof, medicaments containing said compounds and the use of the same.

Peer-reviewed contributions

Poster presentations

- M, Franz, A. Nahardani, K. Grün, M. Krämer, K.-H. Herrmann, S. Moradi, J.R. Reichenbach, **V. Hoerr**. Right ventricular-arterial coupling index derived by CMR reflects sensitively lung histological changes in experimental PAH. DGK: Deutsche Gesellschaft für Kardiologie, Mannheim, Germany 2022.
- H.A.I. Yoshihara, R. Gruetter, **V. Hoerr**. Hepatic and renal ketogenesis of hyperpolarized (1-¹³C)butyrate: functional evidence of metabolic zonation. ISMRM: 30th International Society of Magnetic Resonance in Medicine, online, 2022.
- M. Gerwing, E. Hoffmann, K. Kronenberg, U. Karst, M. Masthoff, A. Helfen, R. Niehoff, **V. Hoerr**, M. Eisenblaetter, W. Heindel, C. Faber, M. Wildgruber. Differenzierung zwischen hoch- und niedrigmalignen Tumoren in einem experimentellen Mausmodell des Mammakarzinoms mittels multiparametrischer MRT - Bildgebung. RöKo: Deutscher Röntgenkongress, online, 2022.
- M. Gerwing, E. Hoffmann, K. Kronenberg, U. Karst, M. Masthoff, A. Helfen, R. Niehoff, **V. Hoerr**, M. Eisenblaetter, W. Heindel, C. Faber, M. Wildgruber. Differentiation between high and low malignant tumor in experimental mouse models of breast cancer with a multiparametric MRI approach. ECR: European Congress of Radiology, online, 2022.
- T. Krähling, J. Bauer, V. Hoerr. Entwicklung und in-vitro-Evaluation einer GlucoCEST-Sequenz auf klinischen 3T MR-Scannern. German Chapter of ISMRM (International Society of Magnetic Resonance in Medicine), Zürich, Switzerland, 2021.
- D. Schache, S. Bardin, L. Ciobanu, C. Faber, **V. Hoerr**. Glucose mutarotation kinetics determined by ultrafast CEST Line Scanning. ESMRMB: 38th European Society for Magnetic Resonance in Medicine and Biology, online, 2021.

- S. Bardin, H. Lambers, D. Schache, J.R. Krug, **V. Hoerr**, C. Faber, F. Boumezbeur, L. Ciobanu. CEST signal at different magnetic fields and temperature conditions for three main brain metabolites. ESMRMB: 37th European Society for Magnetic Resonance in Medicine and Biology, online, 2020.
- D. Schache, S. Bardin, H. Lambers, J. Flament, F. Boumezbeur, C. Faber, L. Ciobanu, **V. Hoerr**. A comparison of different CEST quantification techniques in vitro and in vivo. EMIM: 15th European Molecular Imaging Meeting, online, 2020.
- C. Schwarz, Y. Töre, C. Faber, S. Niemann, **V. Hoerr**. Pathogenic mechanisms of clinical *S. aureus* isolates to induce infective endocarditis. EMIM: 15th European Molecular Imaging Meeting, online, 2020.
- C. Ebert, A. Tannert, **V. Hoerr**, C. Geppert, C. Pöllath, L. Tuchscher, J. Popp, B. Löffler, U. Neugebauer. Photonic imaging can reveal localization of bacteria during hematogenous osteomyelitis. Sepsis update, Weimar, 2019.
- J. Guerra, E. Jentho, L. Hauswald, F. Roestel, S. Sekar, M. Schubert, M. Bauer, **V. Hoerr**, S. Weis. HO-1 mediates metabolic adaptation to heme but not to *Staphylococcus aureus* bacteremia. Sepsis update, Weimar, 2019.
- C. Ebert, A. Tannert, **V. Hoerr**, C. Geppert, L. Tuchscher, B. Löffler, U. Neugebauer. Localisation of bacteria during hematogeneous osteomyelitis. FOM: Focus On Microscopy, London, Great Britain, 2019.
- J. Höhn, L. Fischer-Riepe, Y. Ozegowski, K. Dlubatz, J. Roth, K. Barczyk-Kahlert, B. Löffler, **V. Hoerr**. Age-dependent course of *S. aureus* induced subcutaneous skin infection. EMIM: 13th European Molecular Imaging Meeting, San Sebastian, Spain, 2018.
- C. Schwarz, Y. Töre, **V. Hoerr**, S. Niemann, C. Faber. MRI of *Staphylococcus aureus*-induced infective endocarditis mouse models to reproduce human pathology. EMIM: 13th European Molecular Imaging Meeting, San Sebastian, Spain, 2018.
- Y. Töre, C. Schwarz, **V. Hoerr**, S. Niemann, C. Faber. Clumping factor A plays important role in initiation of *S. aureus*-induced infective endocarditis. EMIM: 13th European Molecular Imaging Meeting, San Sebastian, Spain, 2018.
- M. Krämer, A.G. Motaal, K-H. Herrmann, B. Löffler, J. R. Reichenbach, G.J. Strijkers, **V. Hoerr**. Cardiac 4D phase-contrast MRI at 9.4 T using self-gated ultra-short echo time (UTE) imaging. ISMRM: 25th International Society of Magnetic Resonance in Medicine, Honolulu, Hawaii, USA, 2017.
- C. Schwarz, **V. Hoerr**, S. Niemann, C. Hillgruber, T. Gorge, G. Peters, C. Faber. Assessing severity of *Staphylococcus aureus*-induced infective endocarditis by MRI. EMIM: 12th European Molecular Imaging Meeting, Köln, Germany, 2017.
- **V. Hoerr**, L. Tuchscher, H. Van de Vyver, B. Löffler. In-vivo assessment of a dual antibiotic therapy regimen in a mouse model of *S. aureus* osteomyelitis by using MRI. EMIM: 12th European Molecular Imaging Meeting, Köln, Germany, 2017.
- C. Schwarz, **V. Hoerr**, S. Niemann, G. Peters, C. Faber. Labeling *Staphylococcus aureus* for direct MRI detection. 3rd International Conference Pathophysiology of Staphylococci, Tübingen, Germany, 2016.
- **V. Hoerr**, L. Tuchscher, H. Van de Vyver, B. Löffler. Assessment of a dual antibiotic therapy regimen in a mouse model of *S. aureus* osteomyelitis. 3rd International Conference Pathophysiology of Staphylococci, Tübingen, Germany, 2016.
- P. Bovenkamp, D. Kentrup, A. Busch, H. Pawelski, N.N. Yadav, G. Liu, P.C.M. van Zijl, S. Reuter, **V. Hoerr**. Monitoring of allograft rejection with and without immunosuppressive treatment by glucoCEST. EMIM: 11th European Molecular Imaging Meeting, Utrecht, the Netherlands, 2016.

- P. Bovenkamp, T. Brix, A. Scherzinger, K. Hinrichs, **V. Hoerr**. Quantitative in vivo Streamline Analysis of Cardiac Flow using 4D PC MRI. EMIM: 11th European Molecular Imaging Meeting, Utrecht, the Netherlands, 2016.
- **V. Hoerr**, G. E. Duggan, L. Zbytniuk, K.K.H. Poon, B. Löffler, H. J. Vogel. Action of antibiotics characterized and predicted by NMR metabolomics. ISMRM: 23rd International Society of Magnetic Resonance in Medicine, Toronto, Canada, 2015.
- A. Busch, D. Kentrup, H. Pawelski, N. Yadav, G. Liu, P.C.M. van Zijl, S. Reuter, **V. Hoerr**. GlucoCEST as method for early detection of renal allograft rejection. ISMRM: 23rd International Society of Magnetic Resonance in Medicine, Toronto, Canada, 2015.
- A.G. Motaal, **V. Hoerr**, H. Dong, L.M.J. Florack, K. Nicolay, G.J. Strijkers. Accelerated 4D Phase Contrast UTE MRI. ISMRM: 23rd International Society of Magnetic Resonance in Medicine, Toronto, Canada, 2015.
- A. Moussavi, P. Bovenkamp, **V. Hoerr**, C. Faber, S. Boretius. Real-time Heart MRI of the Mouse. ISMRM: 23rd International Society of Magnetic Resonance in Medicine, Toronto, Canada, 2015.
- M. Nabben, D. Abdurrachim, **V. Hoerr**, M. T. Kuhlmann, P.R. Bovenkamp, M. Schäfers, K. Nicolay, C. Faber, S. Hermann, J.J. Prompers. Metabolic adaptations in diabetes protect the heart from pressure-overload induced failure: a murine in vivo PET, MRI, and MRS approach. NVDO: Annual Diabetes Research Meeting, Oosterbeek, The Netherlands, 2014.
- **V. Hoerr**, J. Ring, L. Tuchscher, N. Nagelmann, M.T. Kuhlmann, C. Faber, B. Löffler. *S. aureus* induced infective endocarditis investigated by MRI in a mouse model. Annual meeting of the German Society for Hygiene and Microbiology (DGHM), Dresden, Germany, 2014.
- L. Frohwein, **V. Hoerr**, C. Faber, K.P. Schäfers. Phantom-based correction of geometric distortions in whole-body small animal PET-MRI using 3D thin-plate splines. IEEE Nuclear Science Symposium and Medical Imaging Conference (IEEE-MIC), Seattle, USA, 2014.
- L. Frohwein, **V. Hoerr**, C. Faber, K.P. Schäfers. Korrektur geometrischer Verzerrungen von MRT-Daten mittels 3D thin plate splines zur Verbesserung der PET/MRT Registrierung. Annual meeting of the German Society for Nuclear Medicine (DGN), Göttingen, Germany, 2014.
- **V. Hoerr**, N. Nagelmann, J. Ring, A. Nauerth, M.T. Kuhlmann, C. Faber. UTE-based Reflection Point analysis for early diagnosis of infected cardiac valves in mice. ISMRM: 22nd International Society of Magnetic Resonance in Medicine, Milan, Italy, 2014.
- J. Ring, **V. Hoerr**, L. Tuchscher, N. Nagelmann, M.T. Kuhlmann, A. Nauerth, B. Löffler, C. Faber. Detection of iron oxide labeled *S. aureus* induced endocarditis in mice by self-gated UTE MRI. ESMI: European Society for Molecular Imaging, Torino, Italy, 2013.
- **V. Hoerr**, N. Nagelmann, A. Nauerth, C. Faber. Cardiac-respiratory self-gated cine UTE for visualization of the cardiac valves. ISMRM: 21st International Society of Magnetic Resonance in Medicine, Salt Lake City, USA, 2013.
- **V. Hoerr**, H. Parkes, K. Halama, S. Mertsch, V. Senner, A. Jeibmann, C. Faber. Metabolomics reveals in vivo significant impact from iron oxide nanoparticle-labeled, grafted cells on the host organism. ISMRM: 21st International Society of Magnetic Resonance in Medicine, Salt Lake City, USA, 2013.
- S. Horst, **V. Hoerr**, A. Beineke, C. Kreis, M. Rohde, G. Peters, C. Faber, B. Löffler, E. Medina. A novel mouse model of *Staphylococcus aureus* chronic osteomyelitis that closely mimics the human infection. ISSSI: 15th International Symposium on Staphylococci and Staphylococcal Infections, Lyon, France, 2012.
- L. Tuchscher, **V. Hoerr**, J. Hueve, N. Nippe, N. Glyvuk, Y. Tsytsyura, J. Klingauf, C. Faber, G. Peters, B. Löffler, MRI to trace *S. aureus* infections: cell labeling and tracking. ISSSI: 15th

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- **V. Hoerr**, S. Horst, C. Kreis, J. Kalinka, L. Tuchscher, B. Löffler, E. Medina, C. Faber. MRI characterization of a novel mouse model of *Staphylococcus aureus* chronic osteomyelitis. ESMRMB: 29th European Society for Magnetic Resonance in Medicine and Biology, Lisbon, Portugal, 2012.
 - **V. Hoerr**, L. Tuchscher, J. Hueve, N. Nippe, N. Glyvuk, Y. Tsytsyura, M. Holtkamp, J. Klingauf, C. Sunderkötter, U. Karst, G. Peters, B. Löffler, C. Faber. Bacterial labeling for *in vivo* detection by MRI. ISMRM Workshop on MRI-Based Cell Tracking, Miami, Florida, USA, 2012
 - V. Heitmann, **V. Hoerr**, M. Hussain, U. Hansen, P. Bruckner, C. Faber, G. Peters, B. Löffler. The role of *Staphylococcus aureus* adhesin Emp in staphylococcal infections: investigation of Emp binding sites to host structures and to the bacterial cell wall. Annual meeting of the German Society for Hygiene and Microbiology (DGHM), Essen, Germany, 2011.
 - E. Lorentzen, A. Dockhorn, M. Krauthausen, J. Zimmermann, T. Klockgether, M. Heneka, N. King, **V. Hoerr**, C. Faber, J. Kühn, M. Müller, W. Hafezi. The chemokine receptor CXCR3 is critically involved in the pathogenesis of experimental murine herpes encephalitis. The Annual Meeting of the Society for Virology (GfV), Freiburg, Germany, 2011.
 - K. Strobel, **V. Hoerr**, F. Schmid, L. Wachsmuth, C. Faber. Early detection of lung inflammation in the mouse by positive contrast from infiltrating iron-labeled macrophages. ESMRMB: 28th European Society for Magnetic Resonance in Medicine and Biology, Leipzig, Germany, 2011.
 - **V. Hoerr**, L. Tuchscher, J. Hueve, L. Wachsmuth, B. Löffler, C. Faber. MRI of pathogenic bacteria: cell labeling and tracking. ESMRMB: 28th European Society for Magnetic Resonance in Medicine and Biology, Leipzig, Germany, 2011.
 - **V. Hoerr**, L. Tuchscher, B. Löffler, L. Wachsmuth, K. Strobel, F. Schmid, C. Faber. Bimodal labeling of *S. aureus* for detection of bacterial colonization in skin infections by MRI. ISMRM: 19th International Society of Magnetic Resonance in Medicine, Montreal, Canada, 2011.
 - **V. Hoerr**, L. Zbytniuk, P. Kubes, H.J. Vogel. Pathological mechanisms of bacterial infections. 6th International Conference of the Metabolomics Society, Amsterdam, Netherlands, 2010.
 - **V. Hoerr**, L. Zbytniuk, P. Kubes, H.J. Vogel. Bacteria-specific biomarkers in mouse-models of infections investigated by NMR spectroscopy. ISMRM: 18th International Society of Magnetic Resonance in Medicine, Stockholm, Sweden, 2010.
 - **V. Hoerr**, L. Zbytniuk, P. Kubes, H.J. Vogel. Bacterial infections and their metabolomic responses studied in mouse-models. 5th International Conference of the Metabolomics Society, Edmonton, Canada, 2009.
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Oral presentations

- W.-T. Zhao, K.-H. Herrmann, M. Krämer, D. Güllmar, J.R. Reichenbach, **V. Hoerr**. Comparison of different T2 fitting models in renal tissue relaxometry. ISMRM: 30th International Society of Magnetic Resonance in Medicine, online, 2022.
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- S. Mandal, U. Neugebauer, A. Tannert, **V. Hoerr**, J. Popp. Comparative image analysis of H&E and fluorescence images of bones in experimental hematogenous osteomyelitis mouse models. FOM: Focus On Microscopy, online, 2021.
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- M. Krämer, K-H. Herrmann, J. R. Reichenbach, **V. Hoerr**. Cardiac 4D phase-contrast MRI at 9.4 T using self-gated ultra-short echo time (UTE) imaging. 20th German Chapter of ISMRM (International Society of Magnetic Resonance in Medicine), Göttingen, Germany, 2017.
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- P. Bovenkamp, T. Brix, A. Scherzinger, C. Karmonik, K. Hinrichs, **V. Hoerr**. Quantitative in vitro Streamline Vorticity Analysis of Intracranial Aneurysm using 4D PC MRI. ESMRMB: 33th European Society for Magnetic Resonance in Medicine and Biology, Vienna, Austria, 2016.
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