

1. General Information

Name: Dr. rer. nat. Irina Heid (née Wasilewitsch)
Date/place of birth: 23.10.1976, Temirtau (Kasachstan)
Gender: female
Address of institution: Institut für diagnostische und interventionelle Radiologie, Klinikum rechts der Isar der Technischen Universität München, Ismaninger Str. 22, D-81675 München

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Current Positions: Postdoctoral Researcher, Lab Head
Children: 2
Parental leave: 2014, 2016

2. University education/ Degree(s)

2006 - 20013 Promotion (Dr. rer.nat.), Technical University of Munich, Gastroenterology
Thesis topic: Pancreatic cancer; Advisor: Prof. Dr. Jens Siveke
2004 - 2006 Master of Science in Biochemistry, Technical University of Munich
Thesis topic: Virology; Advisor: PD Dr. Caroline Staib
2001 - 2004 Bachelor of Science in Biochemistry, Technical University of Munich
Thesis topic: Breast cancer; Advisor: PD Dr. Victor Magdolen

3. Scientific degrees / Board certification

2013 Dr. rer. nat. (Oncology), Technical University of Munich
2006 Master of Science in Biochemistry, Technical University of Munich
2004 Bachelor of Science in Biochemistry, Technical University of Munich

4. Other scientific Degree

n/a

5. Professional Development (post university degree)

2014 - present Lab Head, PostDoc in the Translational Oncologic Imaging Research Group of PD Dr. Braren, Institute of Radiology, Technical University of Munich
2010 - 2014 PostDoc in the lab of PD Dr. Rickmer Braren at the Institute of Radiology, Technical University of Munich

6. Miscellaneous (Honors, Awards, Others)

2013 Ismar Boas Prize – Basic Research Prize - from *Deutschen Gesellschaft für Verdauungs- und Stoffwechselkrankheiten* for best dissertation in the field of diagnostics and therapy
2010 DAAD Conference Travel Grant
2004 Research Scholarship from Science Foundation Ireland

7. Scientific Cooperations to close researchers within SFB 824 / external

Deeply integrated into the SFB 824 since the first funding period, I strongly and successfully cooperate with Jens Siveke and Marija Trajkovic-Arsic (C4), Franz Schilling (A7), Katja Strieger (Z2), Claudia Mendler (A8), Jennifer Altomonte (C8), Dimitrios Karampinos (A9) and Dieter Saur (C9). Additionally, we have a multitude of scientific interactions with several researchers from Faculty of Medicine located at Klinikum rechts der Isar and e.g. Maximilian Reichert, Roland Rad, Hanna Alguel, Marina Lesina and at the Chair of Biomedical Physics e.g. Franz Pfeifer and Julia Herzen.

8. Publications

1. Ai J, Wörmann SM, Görgülü K, Vallespinos M, Zagorac S, Alcalá S, Wu N, Kabacaoglu D, Berninger A, Navarro D, Kaya-Aksoy E, Ruess DA, Ciecieski KJ, Kowalska M, Demir EI, Ceyhan GO, **Heid I**, Braren R, Riemann M, Schreiner S, Hofmann S, Kutschke M, Jastroch M, Slotta-Huspenina J, Muckenhuber A, Schlitter AM, Schmid RM, Steiger K, Diakopoulos KN, Lesina M, Sainz B Jr, Algül H. BCL3 couples cancer stem cell enrichment with pancreatic cancer molecular subtypes. Gastroenterology. 2021 Apr 2:S0016-5085(21)00578-3.
2. Topping GJ*, **Heid I***, Trajkovic-Arsic M, Kritznier L, Grashei M, Hundshammer C, Aigner M, Skinner JG, Braren R, Schilling F. Hyperpolarized ¹³C Spectroscopy with Simple Slice-and-Frequency-Selective Excitation. Biomedicines. 2021 Jan 27;9(2):121. (*equal contribution)
3. Bliemsrieder E, Kaissis G, Grashei M, Topping G, Altomonte J, Hundshammer C, Lohöfer F, **Heid I**, Keim D, Gebrekidan S, Trajkovic-Arsic M, Winkelkotte A, Steiger K, Nawroth R, Siveke J, Schwaiger M, Makowski M, Schilling F, Braren R. Hyperpolarized ¹³C pyruvate magnetic resonance spectroscopy for in vivo metabolic phenotyping of rat HCC. Sci Rep. 2021 Jan 13;11(1):1191.
4. Harder FN, Kamal O, Kaissis GA, **Heid I**, Lohöfer FK, McTavish S, Van AT, Katemann C, Peeters JM, Karampinos DC, Makowski MR, Braren RF. Qualitative and Quantitative Comparison of Respiratory Triggered Reduced Field-of-View (FOV) Versus Full FOV Diffusion Weighted Imaging (DWI) in Pancreatic Pathologies. Acad Radiol. 2020 Dec 31;S1076-6332(20)30704-2.
5. Munkhbaatar E, Dietzen M, Agrawal D, Anton M, Jesinghaus M, Boxberg M, Pfarr N, Bidola P, Uhrig S, Höckendorf U, Meinhardt A-L, Wahida A, **Heid I**, Braren R, Mishra R, Warth A, Muley T, Poh P, Wang X, Fröhling S, Steiger S, Slotta-Huspenina J, van Griensven M, Pfeiffer F, Lange S, Rad R, Spella M, Stathopoulos G, Ruland J, Bassermann F, Weichert W, Strasser A, Branca C, Heikenwälder M, Swanton C, McGranahan N, and Jost P. MCL-1 gains occur with high frequency in lung adenocarcinoma and can be targeted therapeutically. Nat Commun. 2020 Sep 10;11(1):4527.
6. Dantes Z, Yen HY, Pfarr N, Winter C, Steiger K, Muckenhuber A, Hennig A, Lange S, Engleitner T, Öllinger R, Maresch R, Orben F, **Heid I**, Kaissis GA, Shi K, Topping GJ, Stögbauer F, Wirth M, Peschke K, Papargyriou A, Rezaee-Oghazi M, Feldmann K, Schäfer APG, Ranjan R, Lubeseder-Martellato C, Stange DE, Welsch T, Martignoni ME, Ceyhan GO, Friess H, Herner A, Liotta L, Treiber M, von Figura G, Abdelhafez M, Klare P, Schlag C, Algül H, Siveke JT, Braren RF, Weirich G, Weichert W, Saur D, Rad R, Schmid R, Schneider G, Reichert M. Implementing cell-free DNA of pancreatic cancer patient-derived organoids for personalized oncology. JCI Insight. 2020 Jul 2:137809.
7. Kaissis GA, Lohöfer FK, Hörl M, **Heid I**, Steiger K, Munoz-Alvarez KA, Schwaiger M, Rummeny EJ, Weichert W, Paprottka P, Braren R. Combined DCE-MRI- and FDG-PET enable histopathological grading prediction in a rat model of hepatocellular carcinoma. Eur J Radiol. 2020 Mar;124:108848.
8. Trajkovic-Arsic M*, **Heid I***, Steiger K, Gupta A, Fingerle A, Wörner C, Teichmann N, Sengkwawoh-Lueong S, Wenzel P, Beer AJ, Esposito I, Braren R, Siveke JT. Apparent Diffusion Coefficient (ADC) predicts therapy response in pancreatic ductal adenocarcinoma. Sci Rep. 2017 Dec 6;7(1):17038.
9. **Heid I***, Steiger K*, Trajkovic-Arsic M*, Settles M, Eßwein MR, Erkan M, Kleeff J, Jäger C, Friess H, Haller B, Steingötter A, Schmid RM, Schwaiger M, Rummeny EJ, Esposito I, Siveke JT, Braren RF. Co-clinical Assessment of Tumor Cellularity in Pancreatic Cancer. Clin Cancer Res. 2017 Mar 15;23(6):1461-1470.
10. Lubeseder-Martellato C, Alexandrow K, Hidalgo-Sastre A, **Heid I**, Boos SL, Briel T, Schmid RM, Siveke JT. Oncogenic KRas-induced Increase in Fluid-phase Endocytosis is Dependent on N-WASP and is Required for the Formation of Pancreatic Preneoplastic Lesions. EBioMedicine. 2017 Feb;15:90-99.
11. Mandler CT*, Feuchtinger A*, **Heid I***, Aichler M, D'Alessandria C, Pirsig S, Blechert B, Wester HJ, Braren R, Walch A, Skerra A, Schwaiger M. Tumor Uptake of Anti-CD20 Fabs Depends on Tumor Perfusion. J Nucl Med. 2016 Dec;57(12):1971-1977.

12. Lubeseder-Martellato C, Hidalgo-Sastre A, Hartmann C, Alexandrow K, Kamyabi-Moghaddam Z, Sipos B, Wirth M, Neff F, Reichert M, **Heid I**, Schneider G, Braren R, Schmid RM, Siveke JT. Membranous CD24 drives the epithelial phenotype of pancreatic cancer. *Oncotarget*. 2016 Aug 2;7(31):49156-49168.
13. Maresch R, Mueller S, Veltkamp C, Öllinger R, Friedrich M, **Heid I**, Steiger K, Weber J, Engleitner T, Barenboim M, Klein S, Louzada S, Banerjee R, Strong A, Stauber T, Gross N, Geumann U, Lange S, Ringelhan M, Varela I, Unger K, Yang F, Schmid RM, Vassiliou GS, Braren R, Schneider G, Heikenwalder M, Bradley A, Saur D, Rad R. Multiplexed pancreatic genome engineering and cancer induction by transfection-based CRISPR/Cas9 delivery in mice. *Nat Commun*. 2016 Feb 26;7:10770.
14. Weber J, Öllinger R, Friedrich M, Ehmer U, Barenboim M, Steiger K, **Heid I**, Mueller S, Maresch R, Engleitner T, Gross N, Geumann U, Fu B, Segler A, Yuan D, Lange S, Strong A, de la Rosa J, Esposito I, Liu P, Cadiñanos J, Vassiliou GS, Schmid RM, Schneider G, Unger K, Yang F, Braren R, Heikenwälder M, Varela I, Saur D, Bradley A, Rad R. CRISPR/Cas9 somatic multiplex-mutagenesis for high-throughput functional cancer genomics in mice. *Proc Natl Acad Sci U S A*. 2015 Nov 10;112(45):13982-7.
15. Mazur PK, Herner A, Mello SS, Wirth M, Hausmann S, Sánchez-Rivera FJ, Lofgren SM, Kuschma T, Hahn SA, Vangala D, Trajkovic-Arsic M, Gupta A, **Heid I**, Noël PB, Braren R, Erkan M, Kleeff J, Sipos B, Sayles LC, Heikenwalder M, Heßmann E, Ellenrieder V, Esposito I, Jacks T, Bradner JE, Khatri P, Sweet-Cordero EA, Attardi LD, Schmid RM, Schneider G, Sage J, Siveke JT. Combined inhibition of BET family proteins and histone deacetylases as a potential epigenetics-based therapy for pancreatic ductal adenocarcinoma. *Nat Med*. 2015 Oct;21(10):1163-71.
16. Groß C, Steiger K, Sayyed S, **Heid I**, Feuchtinger A, Walch A, Heß J, Unger K, Zitzelsberger H, Settles M, Schlitter AM, Dworniczak J, Altomonte J, Ebert O, Schwaiger M, Rummeny E, Steingötter A, Esposito I, Braren R. Model Matters: Differences in Orthotopic Rat Hepatocellular Carcinoma Physiology Determine Therapy Response to Sorafenib. *Clin Cancer Res*. 2015 Oct 1;21(19):4440-50.
17. Aoqui C, Chmielewski S, Scherer E, Eissler R, Sollinger D, **Heid I**, Braren R, Schmaderer C, Megens RT, Weber C, Heemann U, Tschöp M, Baumann M. Microvascular dysfunction in the course of metabolic syndrome induced by high-fat diet. *Cardiovasc Diabetol*. 2014 Feb 3;13:31.
18. **Heid I**, Lubeseder-Martellato C, Sipos B, Mazur PK, Lesina M, Schmid RM, Siveke JT. Early requirement of Rac1 in a mouse model of pancreatic cancer. *Gastroenterology*. 2011 Aug;141(2):719-30, 730.e1-7.
19. Krol J, Mengele K, Ottl-Mantchenko I, Welk A, **Wasilewitsch I**, von Steinburg SP, Schneider KT, Schmitt M. Ex vivo detection of apoptotic trophoblast cells applying flow cytofluorometry and immunocytochemistry using M30 antibody directed to the cytokeratin 18 neo-epitope. *Int J Mol Med*. 2005 Sep;16(3):415-20.

(*equal contribution)