

Curriculum vitae

Prof. Dr. D. Hilfiker-Kleiner

Name: Hilfiker-Kleiner, Denise, Prof. Dr. rer. nat., *25.09.1961
Address: Philipps-Universität Marburg, Fachbereich Medizin – Der Dekan
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35032 Marburg
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Position: Dean of the Department of Medicine at the Philipps University of Marburg

Academic education and degrees

1986 – 1988 Diploma thesis “Untersuchungen zum Geschlechtsbestimmungsmechanismus bei *Musca domestica* Lf”
at the University of Zurich (CH), (Prof. Dr. R. Nöthiger)

Scientific degrees

2007 Post-doctoral lecturing qualification (Habilitation) in Molecular Cardiology, "The Role of STAT3 for adaptation at the heart to physiological and pathophysiological stress" at the MHH, Hannover (Prof. H. Drexler)
1989 – 1994 PhD thesis: “Analysis of the sex determination mechanism in soma and germ line of *Musca domestica*”. University of Zurich, Switzerland (Prof. R. Nöthiger) and EMORY University (Prof. J. Lucchesi) (Georgia, USA)

Academic and research appointments

Since 2020 Dean of the Department of Medicine at the Philipps University of Marburg and Professor (W3) for cardiovascular complication of oncologic therapies
Since 2020 Member of the Supervisory Board of the Charité Berlin, Germany
Since 2018 Member of the German Council of Science and Humanities (Wissenschaftsrat)
Since 2018 Member of the Supervisory Board of the German Technion Society
2013 - 2020 Dean of Research (Forschungsdekanin) at the Medizinische Hochschule Hannover (MHH)
2012 - 2020 Professor (W3) for Molecular Cardiology in the Department of Cardiology and Angiology (Prof. J. Bauersachs), MHH
2008 - 2012 Professor (W2) for Molecular Cardiology in the Department of Cardiology and Angiology (Prof. J. Bauersachs), MHH
2002 - 2008 Post-doctoral lecturer in the Department of Cardiology and Angiology (Prof. Helmut Drexler), MHH
1997 - 2001 Research assistant, Department of Cardiology and Angiology (Prof. Helmut Drexler), MHH
1994 - 1996 Postdoctoral Research Assistant, EMORY University (Prof. J. Lucchesi)

Functions and awards

2018 Lower Saxony Science Award (1. Prize) category "outstanding researcher at a university", Hannover
2018 Ketty Schwartz Award of the International Society of Heart Research – European Section, Annual Meeting, Amsterdam, The Netherlands
2018 Brutsaert Lecture, Heart Failure Association of the ESC Winter Meeting, Les Diablerets, Switzerland

2017	Research Award of the German Technion Society
2016	ESC William Harvey Lecture of Basic Science, ESC, Rom, Italy
2010	Olson-Gourley Lecture, Cardiomyopathy Association, UK
2009	Arthur Weber Prize, German Cardiac Society
2007	Sir Hans Krebs Prize, Friends of the Hannover Medical School
2007	Outstanding Achievement Award of ESC for the category "Cardiac Biology"
2003	Junior Investigator Award (3. Prize) European Society of Cardiology, Vienna, Austria
2003	Rudolf-Thauer-Posterpreis (1.Prize), German Cardiac Society, Mannheim, Germany
2002	Rudolf-Thauer-Posterpreis (3.Prize) German Cardiac Society, Mannheim, Germany
2000	Young Investigator Award, 16th Physiologists-Cardiologists-Workshop, Potsdam, Germany 2000

Memberships

- Fellow of European Society of Cardiology (ESC), member of the ESC Program Committee
- Member and past chair of the ESC "Working Group on Myocardial Function"
- Member of the Heart Failure Association (HFA)
- Member of the Committee on Translational Research (HFA, ESC)
- Member of the Study Group on Peripartum Cardiomyopathy (HFA, ESC)
- Past secretary of ISHR Council European Section
- Member of the German Cardiac Society (Deutsche Gesellschaft für Kardiologie – Herz- und Kreislaufforschung, DGK) and member of the DGK program committee
- Member of the Commission on Experimental Research of the German Cardiac Society
- Editorial Board of: Basic Research in Cardiology, Frontiers, JAK-STAT (LandesBioscience), Cardiovascular Research
- Editor for Vascular Pharmacology
- Past chair of the Franz-Maximilian Groedel Forschungspreis

Editorial board / Reviewer

- Editorial Board Member: Basic Research in Cardiology, European Heart Journal, Cardiovascular Research, EHJ, ESC-HF
- Reviewer, e.g. Nature Medicine, JCI, JACC, EHJ, Circulation, Circulation Research, CVR, EJHF, JMCC, BRIC, Frontiers, PloS etc.
- Reviewer for the Fund for Scientific Research - FNRS (F.R.S.-FNRS)

Major research interests

- Analysing signalling pathways in cardiac cells relevant for cardiac physiological and pathophysiological processes.
- Signalling pathways for endogenous regeneration abilities of the heart especially after pregnancy or treatment with cardiotoxic agents.
- Pathophysiology of pregnancy associated cardiovascular disease.
- Cardio-Oncology

Patent applications

CCN1 to Cover Decellularized Heart Valves : PCT/EP2008/005556
 Diagnosing and treating peripartum cardiomyopathy through the level of plasminogen activator inhibitor (PCT/EP2016/071188)

Publications (selected publications out of 203)

1. Heimerl M, Sieve I, Ricke-Hoch M, Erschow S, Battmer K, Scherr M, **Hilfiker-Kleiner D**. Neuraminidase-1 promotes heart failure after ischemia/reperfusion injury by affecting cardiomyocytes and invading monocytes/macrophages. *Basic Res Cardiol* 2020;115(6):62.
2. Ricke-Hoch M, Hoes MF, Pfeffer TJ, Schlothauer S, Nonhoff J, Haidari S, Bomer N, Scherr M, Stapel B, Stelling E, Kiyan Y, Falk C, Haghikia A, Binah O, Arany Z, Thum T, Bauersachs J, van der Meer P, **Hilfiker-Kleiner D**. In peripartum cardiomyopathy plasminogen activator inhibitor-1 is a potential new biomarker with controversial roles. *Cardiovasc Res* 2020;116(11):1875-1886.
3. Ricke-Hoch M, Pfeffer TJ, **Hilfiker-Kleiner D**. Peripartum cardiomyopathy: basic mechanisms and hope for new therapies. *Cardiovasc Res* 2020;116(3):520-531.
4. Sliwa K, Petrie MC, van der Meer P, Mebazaa A, **Hilfiker-Kleiner D**, Jackson AM, Maggioni AP, Laroche C, Regitz-Zagrosek V, Schaufelberger M, Tavazzi L, Roos-Hesselink JW, Seferovic P, van Spaendonck-Zwarts K, Mbakwem A, Bohm M, Mouquet F, Pieske B, Johnson MR, Hamdan R, Ponikowski P, Van Veldhuisen DJ, McMurray JJV, Bauersachs J. Clinical presentation, management, and 6-month outcomes in women with peripartum cardiomyopathy: an ESC EORP registry. *Eur Heart J* 2020;41(39):3787-3797.
5. Stelling E, Ricke-Hoch M, Erschow S, Hoffmann S, Bergmann AK, Heimerl M, Pietzsch S, Battmer K, Haase A, Stapel B, Scherr M, Balligand JL, Binah O, **Hilfiker-Kleiner D**. Increased prostaglandin-D2 in male but not female STAT3-deficient hearts shift cardiac progenitor cells from endothelial to white adipocyte differentiation. *PLOS Biol* 2020.
6. **Hilfiker-Kleiner D**, Haghikia A, Berliner D, Vogel-Claussen J, Schwab J, Franke A, Schwarzkopf M, Ehlermann P, Pfister R, Westenfeld r, Stangl V, Kindermann I, Kühl U, Angermann C, Schlitt A, Fischer D, Podewski E, Böhm M, Sliwa K and Bauersachs J. Bromocriptine for the Treatment of Peripartum Cardiomyopathy: A Multicenter Randomized Study. *European heart journal*. 2017.
7. Thackeray JT, Pietzsch S, Stapel B, Ricke-Hoch M, Lee CW, Bankstahl JP, Scherr M, Heineke J, Scharf G, Haghikia A, Bengel FM and **Hilfiker-Kleiner D**. Insulin supplementation attenuates cancer-induced cardiomyopathy and slows tumor disease progression. *JCI Insight*. 2017;2.
8. Stapel B, Kohlhaas M, Ricke-Hoch M, Haghikia A, Erschow S, Knuuti J, Silvola JM, Roivainen A, Saraste A, Nickel AG, Saar JA, Sieve I, Pietzsch S, Muller M, Bogeski I, Kappl R, Jauhiainen M, Thackeray JT, Scherr M, Bengel FM, Hagl C, Tudorache I, Bauersachs J, Maack C and **Hilfiker-Kleiner D**. Low STAT3 expression sensitizes to toxic effects of beta-adrenergic receptor stimulation in peripartum cardiomyopathy. *Eur Heart J*. 2016.
9. Ware JS, Li J, Mazaika E, Yasso CM, DeSouza T, Cappola TP, Tsai EJ, **Hilfiker-Kleiner D**, Kamiya CA, Mazarotto F, Cook SA, Halder I, Prasad SK, Pisarcik J, Hanley-Yanez K, Alharethi R, Damp J, Hsich E, Elkayam U, Sheppard R, Kealey A, Alexis J, Ramani G, Safirstein J, Boehmer J, Pauly DF, Wittstein IS, Thohan V, Zucker MJ, Liu P, Gorcsan J, 3rd, McNamara DM, Seidman CE, Seidman JG, Arany Z, Imac and Investigators I. Shared Genetic Predisposition in Peripartum and Dilated Cardiomyopathies. *N Engl J Med*. 2016;374:233-41.
10. **Hilfiker-Kleiner D** and Sliwa K. Pathophysiology and epidemiology of peripartum cardiomyopathy. *Nature reviews Cardiology*. 2014;11:364-70.
11. Haghikia A, Podewski E, Libhaber E, Labidi S, Fischer D, Roentgen P, Tsikas D, Jordan J, Lichtinghagen R, von Kaisenberg CS, Struman I, Bovy N, Sliwa K, Bauersachs J and **Hilfiker-Kleiner D**. Phenotyping and outcome on contemporary management in a German cohort of patients with peripartum cardiomyopathy. *Basic Res Cardiol*. 2013;108:366.
12. *Halkein J, *Tabruyn SP, *Ricke-Hoch M, Haghikia A, Nguyen NQN, Scherr M, Castermans K, Malvaux L, Lambert V, Thiry M, Sliwa K, Noel A, Martial JA, **#Hilfiker-Kleiner D**, and **#Struman I**. (2013) MicroRNA-146a, a therapeutic target and biomarker for peripartum cardiomyopathy. (*JCI* 123, 2143-54. *Equally contributing first authors, #equally contributing last authors)
13. Patten IS, Rana S, Shahul S, Rowe GC, Jang C, Liu L, Hacker MR, Rhee JS, Mitchell J, Mahmood F, Hess P, Farrell C, Koullis N, Khankin EV, Burke SD, Tudorache I, Bauersachs J, del Monte F, **Hilfiker-Kleiner D**, Karumanchi SA, Arany Z. (2012) Cardiac angiogenic imbalance leads to peripartum cardiomyopathy. *Nature*. 485(7398):333-8. doi: 10.1038/nature11040.
14. Hoch M, Fischer P, Stapel B, Missol-Kolka E, Sekkali B, Scherr M, Favret F, Braun T, Eder M, Schuster-Gossler K, Gossler A, Hilfiker A, Balligand JL, Drexler H, **Hilfiker-Kleiner D** (2011) Erythropoietin Preserves the Endothelial Differentiation Capacity of Cardiac Progenitor Cells and Reduces Heart Failure during Anticancer Therapies. *Cell Stem Cell* 9(2): 131-143
15. **Hilfiker-Kleiner D**, Kaminski K, Podewski E, Bonda T, Schaefer A, Sliwa K, Forster O, Quint A, Landmesser U, Doerries C, Luchtefeld M, Poli V, Schneider MD, Balligand JL, Desjardins F, Ansari A, Struman I, Nguyen NQ, Zschemisch NH, Klein G, Heusch G, Schulz R, Hilfiker A, Drexler H (2007) A cathepsin D-cleaved 16 kDa form of prolactin mediates postpartum cardiomyopathy. *Cell* 128(3): 589-600