UKD Universitätsklinikum Düsseldorf

hhu Heinrich Heine Universität Düsseldorf

Univ.-Prof. Dr. med. Malte Kelm, FESC

Current position and address

Chair of the Department for
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Training and education

1981 - 1986	Medical studies, University Cologne
1986 - 1987	Practical year, University Cologne
1987 - 1989	Post-doctoral fellow, Institute for Cardiovascular Physiology HHU Düsseldorf and Clinical Research Centre, London
1989 - 1995	Training Internal Medicine, Clinic of Cardiology, Pulmonary Diseases and Vascular Medicine University Hospital Duesseldorf
1995 - 1998	Senior physician, Clinic of Cardiology, Pulmonary Diseases and Vascular Medicine University Hospital Düsseldorf
1998 - 2005	Leading senior physician of the Cardiac Catheterization laboratory, Clinic of Cardiology, Pulmonary Diseases and Vascular Medicine University Hospital Düsseldorf
2005 - 2009	Director of the Clinic of Cardiology, Pulmonary Diseases, Vascular and Internal Intensive Medicine, Medical Clinic I, University Hospital Aachen
since 2009	Director of the Clinic of Cardiology, Pulmonary Diseases and Vascular Medicine
since 2011	Founding director of CARID (Cardiovascular Research Center Düsseldorf)
since 2013	Board of HGZ (Herz-und Gefäßzentrum Düsseldorf)
2015	Appointed professor of cardiology at Manchester University
since 2019	Director of the Center for Conservative Medicine at the University Hospital Düsseldorf

Positions in scientific organizations and associations

1996 - 2003	Board working group Vascular Medicine, DGK
1997 - 2015	Clinical Committee of the DGK
2004 - 2005	GRK 1089 – protein interactions and modifications in the heart, founding speaker
2007 - 2009	FOR 809 - chemokines and adhesion molecules
2008 - 2009	GRK 1508 - (EUCAR) arterial remodeling processes
2008 - 2013	Congress Committee, ESC
2009 - 2014	EFRE - Med-in-NRW-Klappeninitiative, speaker
2009 - 2015	EU-consortium FLAVIOLA, speaker
2010 - 2018	Scientific Advisory Board of the DSHF (Dt. Stiftung für Herzforschung), board member
2011 - 2014	Review Board Herzkreislauf DFG
2011 - 2014	Review Board Medizintechnik DFG
2012 - 2019	Scientific Advisory Board Medica Düsseldorf e.V.
since 2013	GRK 1902 – communications in the cardio-system

since 2015	Permanent committee-cardiological care, DGK
since 2015	SFB 1116 – myocardial ischemia, deputy speaker
2016 - 2019	Committee certification, DGK, Chair
2019 - 2022	Scientific Advisory Board Walter-Siegenthaler-Gesell.
since 2019	TRR 259 – aortic diseases, deputy speaker
since 2019	Board member, Deutsche Herzstiftung
since 2019	Member of WGI Committee, DFG
since 2020	Member of the Senate Committee for CRC evaluation, DFG
since 2020	Member of the Grants Committee, SFB, DFG
since 2022	Jury member of the “Anna Wunderlich und Ernst Jühling-Stiftung”

Guideline committees

- Guidelines for setting up and operating cardiac catheterization and hybrid operating rooms / hybrid laboratories, DGK
- Guidelines for diagnostic catheterizations, DGK
- National Committee for Preoperative Risk Stratification, DGK
- European committee for pre-operative risk assessment, ESC
- European committee for Non Cardiac Surgery: Cardiovascular assessment and management, ESC
- Founding member of the board CAC (Cardiac Arrest Center) of the GRC (German Resuscitation Council)
- Guidelines for mechanical circulatory support, AWMF

Editorial boards

- Basic Research in Cardiology
- European Heart Journal
- Clinical Research in Cardiology

Editorships

- Kardiologie.org (since 2014)
- Zeitschrift Aktuelle Kardiologie (since 2015)
- Deutsche Medizinische Wochenschrift (until 2019)

Memberships

- American Heart Association
- European Society for Clinical Investigations
- Deutsche Gesellschaft für Kardiologie - Herz- und Kreislaufforschung e.V.
- European Society of Cardiology (FESC)
- Deutschen Gesellschaft für Angiologie - Gesellschaft für Gefäßmedizin e.V.
- Deutsche Gesellschaft für Ultraschall in der Medizin e.V.
- Deutsche Hochdruckliga e.V.
- Deutschen Gesellschaft für Innere Medizin e.V.
- Deutsche Gesellschaft für Internistische Intensivmedizin und Notfallmedizin
- Deutsche Gesellschaft für Klinische Pharmakologie und Therapie e.V.
- Society of Nitric Oxide Research

Honors and awards

- 1986 Homburg-Preis
- 1990 Bennigsen-Förder-Preis
- 1992 Young Investigator Award, AHA
- 1992 Gerhard-Hess Stipendiat, DFG
- 1995 Young Investigator Award, AHA
- 1996 Walter-Clawiter-Preis, Universität Düsseldorf

- 2002 Albert-Fraenkel Preis, DGK
- 2003 Arthur Weber-Preis
- 2011 MEDICA Excellence Award Cardiology, Pulmonary Diseases and Vascular Medicine
- 2014 Franz Loogen-Preis

Research fields

- Coronary blood flow ischemia/reperfusion
- NO-metabolism, endothelial dysfunction
- flavanols, nutrition and cardiovascular function
- interventional therapies in acute myocardial infarction

10 major publications

1. Leo F, Suvorava T, Heuser SK, Li J, LoBue A, Barbarino F, Piragine E, Schneckmann R, Hutzler B, Good ME, Fernandez BO, Vornholz L, Rogers S, Doctor A, Grandoch M, Stegbauer J, Weitzberg E, Feelisch M, Lundberg JO, Isakson BE, **Kelm M**, Cortese-Krott MM. Red blood cell and endothelial eNOS independently regulate circulating nitric oxide metabolites and blood pressure. *Circulation*. 2021;144:870-889

2. Zweck E, Scheiber D, Jelenik T, Bönner F, Horn P, Pesta D, Schultheiss HP, Boeken U, Akhyari P, Lichtenberg A, **Kelm M**, Roden M, Westenfeld R, Szendroedi J. Exposure to type 2 diabetes provokes mitochondrial impairment in apparently healthy human hearts. *Diabetes Care*. 2021;44:e82-e84

3. Wischmann P, Kuhn V, Suvorava T, Muessig JM, Fischer JW, Isakson BE, Haberkorn SM, Flögel U, Schrader J, Jung C, Cortese-Krott MM, Heusch G, **Kelm M**. Anaemia is associated with severe RBC dysfunction and a reduced circulating NO pool: vascular and cardiac eNOS are crucial for the adaptation to anaemia. *Basic Res Cardiol*. 2020;115:43

4. Petzold T, Thienel M, Dannenberg L, Mourikis P, Helten C, Ayhan A, M'Pembele R, Achilles A, Trojovky K, Konsek D, Zhang Z, Regenauer R, Pircher J, Ehrlich A, Lusebrink E, Nicolai L, Stocker TJ, Brandl R, Roschenthaler F, Strecker J, Saleh I, Spannagl M, Mayr CH, Schiller HB, Jung C, Gerdes N, Hoffmann T, Levkau B, Hohlfeld T, Zeus T, Schulz C, **Kelm M**, Polzin A. Rivaroxaban reduces arterial thrombosis by inhibition of fxa-driven platelet activation via protease activated receptor-1. *Circ Res*. 2020;126:486-500

5. Jelenik T, Flögel U, Álvarez-Hernández E, Scheiber D, Zweck E, Ding Z, Rothe M, Mastrototaro L, Kohlhaas V, Kotzka J, Knebel B, Müller-Wieland D, Moellendorf S, Gödecke A, **Kelm M**, Westenfeld R, Roden M, Szendroedi J. Insulin resistance and vulnerability to cardiac ischemia. *Diabetes*. 2018;67:2695-2702

6. Cortese-Krott MM, Rodriguez-Mateos A, Sansone R, Kuhnle GG, Thasian-Sivarajah S, Krenz T, Horn P, Krisp C, Wolters D, Heiss C, Kroncke KD, Hogg N, Feelisch M, **Kelm M**. Human red blood cells at work: identification and visualization of erythrocytic eNOS activity in health and disease. *Blood*. 2012;120:4229-4237

7. Balzer J, Rassaf T, Heiss C, Kleinbongard P, Lauer T, Merx M, Heussen N, Gross HB, Keen CL, Schroeter H, **Kelm M**. Sustained benefits in vascular function through flavanol-containing cocoa in medicated diabetic patients a double-masked, randomized, controlled trial. *J Am Coll Cardiol.* 2008;51:2141-2149

8. Kleinbongard P, Schulz R, Rassaf T, Lauer T, Dejam A, Jax T, Kumara I, Gharini P, Kabanova S, Ozuyaman B, Schnurch HG, Godecke A, Weber AA, Robenek M, Robenek H, Bloch W, Rosen P, **Kelm M**. Red blood cells express a functional endothelial nitric oxide synthase. *Blood.* 2006;107:2943-2951

9. Schroeter H, Heiss C, Balzer J, Kleinbongard P, Keen CL, Hollenberg NK, Sies H, Kwik-Uribe C, Schmitz HH, **Kelm M**. (-)-Epicatechin mediates beneficial effects of flavanol-rich cocoa on vascular function in humans. *Proc Natl Acad Sci USA*. 2006;103:1024-1009

10. Rassaf T, Poll LW, Brouzos P, Lauer T, Totzeck M, Kleinbongard P, Gharini P, Andersen K, Schulz R, Heusch G, Modder U, **Kelm M**. Positive effects of nitric oxide on left ventricular function in humans. *Eur Heart J*. 2006;27:1699-1705