

Curriculum vitae

Prof. Dr. med. Dierk Thomas

Studium

10/1995 - 05/2002 Studium der Humanmedizin an der Ruprecht-Karls-Universität Heidelberg

02/2000 - 03/2000 Studienaufenthalt an der University of Oxford (England)

Promotion

05/2002 Promotion an der Ruprecht-Karls-Universität Heidelberg, Abteilung für Innere Medizin III (Kardiologie, Angiologie, Pulmologie; Ärztlicher Direktor: Prof. Dr. W. Kübler) der Medizinischen Universitätsklinik mit dem Thema „Der repolarisierende HERG-Kaliumstrom im Herzen“ (Note: Summa cum laude; Betreuer: Prof. Dr. J. Kiehn)

Habilitation

05/2010 Habilitation und Verleihung der Venia legendi für das Fach Innere Medizin an der Universität Heidelberg mit dem Thema „Genetik und Pharmakologie repolarisierender Kaliumströme im Herzen“

06/2013 Ernennung zum außerplanmäßigen Professor durch die Universität Heidelberg

Berufsausbildung

07/2002 - 12/2003 Arzt im Praktikum in der Abteilung für Innere Medizin III (Kardiologie, Angiologie, Pulmologie; Ärztlicher Direktor: Prof. Dr. H.A. Katus) der Universitätsklinik Heidelberg

01/2004 – 03/2010 Assistenzarzt in der Klinik für Innere Medizin III-Kardiologie, Angiologie und Pulmologie der Universitätsklinik Heidelberg

03/2010 Facharzt für Innere Medizin

- 11/2010 Ernennung zum Oberarzt der Abteilung für Innere Medizin III-
Kardiologie, Angiologie und Pulmologie der Universitätsklinik
Heidelberg
- 06/2011 Schwerpunktbezeichnung Kardiologie
- 10/2013 Leitung des Bereichs „Kardiale Elektrophysiologie“ der Abteilung für
Innere Medizin III der Universitätsklinik Heidelberg (bis 30.09.2020:
Prof. Dr. H.A. Katus; ab 01.10.2020: Prof. Dr. N. Frey)
- 04/2014 Zusatzqualifikation Spezielle Rhythmologie – Invasive
Elektrophysiologie der Deutschen Gesellschaft für Kardiologie – Herz-
und Kreislaufforschung e.V.

Wissenschaftlicher Werdegang

- 04/1999 - 09/1999 Forschungsaufenthalt am Department of Physiology and Biophysics,
Case Western Reserve University
(Direktor: Prof. Dr. A.M. Brown) in Cleveland (USA)
- 09/1997–11/2004 Wissenschaftliche Mitarbeit in der Arbeitsgruppe „Molekulare
Elektrophysiologie“ (Leitung: Prof. Dr. J. Kiehn/Prof. Dr. C. Karle) der
Medizinischen Universitätsklinik Heidelberg (Abteilung für Kardiologie,
Angiologie, Pulmologie; Ärztlicher Direktor: Prof. Dr. H.A. Katus)
- 11/2004 – 04/2007 Forschungsaufenthalt am Institute for Molecular Pediatric Science,
Department of Pediatrics, University of Chicago (Director: Prof. Dr.
Steve A. Goldstein)
- Seit 2007 Leitung der Arbeitsgruppe “Molekulare und translationale kardiale
Elektrophysiologie” der Medizinischen Universitätsklinik
Heidelberg

Lehre

- Seit 07/2002 Lehrtätigkeit im Rahmen des Reformstudiengangs „HEICUMED“ der
Medizinischen Fakultät der Universität Heidelberg
- Seit 10/1999 Betreuung von medizinischen Doktoranden und Habilitanden in der
Abteilung für Innere Medizin III der Medizinischen Universitätsklinik
Heidelberg
- 2009 Gründung des kardiovaskulären Promotionsprogramms „Cardiology
Career Program“ an der Medizinischen Fakultät Heidelberg

Stipendien und Preise

1996-2002	Stipendiat der Studienstiftung des Deutschen Volkes
2002	Graduiertenstipendium der Novartis-Stiftung für Therapeutische Forschung
2002	Young Investigator Award der Medizinischen Fakultät der Universität Heidelberg
2002	Ludolf-Krehl-Preis der Südwestdeutschen Gesellschaft für Innere Medizin
2003	Forßmann-Nachwuchsstipendium der Stiftung Kardiologie 2000 der Ruhr-Universität Bochum
2003	Hans-Dengler-Forschungsstipendium für Klinische Pharmakologie
2004	Reisestipendium der GlaxoSmithKline-Stiftung für die Jahrestagung der „Biophysical Society“ in Baltimore, USA
2004	Max-Schaldach-Forschungsstipendium der Deutschen Gesellschaft für Kardiologie – Herz- und Kreislaufforschung e.V.
2004 - 2007	Emmy Noether-Forschungsstipendium der DFG
2009	Du Bois-Reymond Preis; Deutsche Physiologische Gesellschaft
2009	Klaus-Georg und Sigrid Hengstberger-Preis der Universität Heidelberg
2011	Wolfgang-Trautwein-Forschungspreis der Deutschen Gesellschaft für Kardiologie – Herz- und Kreislaufforschung e.V.
2011	Joachim Siebeneicher-Forschungspreis für biomedizinische Forschung der Medizinischen Fakultät der Universität Heidelberg
2012	Julius-Klob-Publikationspreis der Deutschen Gesellschaft für Kardiologie – Herz- und Kreislaufforschung e.V.
2012	Rudolf-Thauer-Posterpreis (1. Preis) der Deutschen Gesellschaft für Kardiologie – Herz- und Kreislaufforschung e.V.
2013	Klaus-Georg-und-Sigrid-Hengstberger-Forschungsstipendium der Deutschen Gesellschaft für Kardiologie – Herz- und Kreislaufforschung e.V.
2015	Hans-Jürgen-Bretschneider Posterpreis (1. Preis), Deutsche Gesellschaft für Kardiologie – Herz- und Kreislaufforschung e.V.

Mitgliedschaften

American Heart Association

- o Fellow der American Heart Association (FAHA)
- o Mitglied des Council on Basic Cardiovascular Sciences und des Council on Functional Genomics and Translational Biology

Deutsche Gesellschaft für Kardiologie – Herz- und Kreislaufforschung

- o Mitglied der AG 1 Rhythmologie
- o Nukleusmitglied der AG 1 Rhythmologie (2017-2019)
- o Mitglied der AG 8 Genetik und Molekularbiologie kardiovaskulärer Erkrankungen
- o Mitglied der AG 18 Zelluläre Elektrophysiologie
- o Nukleusmitglied der AG 18 Zelluläre Elektrophysiologie (2010 – 2020)
- o Stellvertretender Sprecher der AG 18 (2014 – 2016)
- o Sprecher der AG 18 (2016 – 2018)
- o Sprecher des Cluster G (2021-2023)

European Heart Rhythm Association

- o Fellow der European Heart Rhythm Association (FEHRA)

European Society of Cardiology o Fellow der European Society of Cardiology (FESC)

- o Mitglied der ESC Working Group on Cardiac Cellular Electrophysiology
- o Nukleusmitglied der ESC Working Group on Cardiac Cellular Electrophysiology (2016 – 2020)

Heart Rhythm Society o Fellow der Heart Rhythm Society (FHRS)

- o Mitglied des Young Investigator Award Subcommittee (2015-2019)

Kompetenznetz Vorhofflimmern e.V.

- o Mitglied des Lenkungsausschusses

Gutachtertätigkeiten (Auswahl)

Agence Nationale de la Recherche (Frankreich)

Biotechnology and Biological Sciences Research Council (UK)

Centre Européen de Recherche en Biologie et en Médecine (Frankreich)

Deutsche Forschungsgemeinschaft

Deutsche Gesellschaft für Kardiologie

Deutsche Herzziftung/Deutsche Stiftung für Herzforschung

Heart Research UK

Ministère de l'éducation nationale, de l'enseignement supérieur et de la recherche (Frankreich)

National Medical Research Council (Singapur)

Research Foundation Flanders (Belgien)

Studienstiftung des Deutschen Volkes

Reviewertätigkeit für wissenschaftliche Fachzeitschriften (Auswahl)

British Journal of Pharmacology
Cardiovascular Research
Cell Biochemistry and Biophysics
Circulation
Drug Discovery Today
Europace
European Biophysics Journal
European Heart Journal
European Journal of Neuroscience
FASEB Journal
Heart Rhythm
Human Mutation
Journal of Membrane Biology
Journal of Molecular and Cellular Cardiology
Journal of Molecular Medicine
Journal of Pharmacology and Experimental Therapeutics
Journal of Physiology
Journal of the American College of Cardiology
Journal of the American Heart Association
Life Sciences
Molecular and Cellular Neuroscience
Nature Reviews Cardiology
Naunyn-Schmiedebergs Archives of Pharmacology
Pflügers Archiv European Journal of Physiology
Physiological Reviews
PLoS One

Publikationen [Stand Oktober 2021] 2021

Fabritz L, Crijns HJGM, Guasch E, Goette A, Häusler KG, Kotecha D, Lewalter T, Meyer C, Potpara TS, Rienstra M, Schnabel RB, Willems S, Breithardt G, Camm AJ, Chan A, Chua W, de Melis M, Dimopoulou C, Dobrev D, Easter C, Eckardt L, Haase D, Hatem S, Healey JS, Heijman J, Hohnloser SH, Huebner T, Ilyas BS, Isaacs A, Kutschka I, Leclercq C, Lip GYH, Marinelli EA, Merino JL, Mont L, Nabauer M, Oldgren J, Pürerfellner H, Ravens U, Savelieva I, Sinner MF, Sitch A, Smolnik R,

Steffel J, Stein K, Stoll M, Svennberg E, **Thomas D**, Van Gelder IC, Vardar B, Wakili R, Wieloch M, Zeemering S, Ziegler PD, Heidebuchel H, Hindricks G, Schotten U, Kirchhof P (2021) Dynamic risk assessment to improve quality of care in patients with atrial fibrillation: the 7th AFNET/EHRA Consensus Conference *Europace* 23: 329-344

Kany S, Brachmann J, Lewalter T, Akin I, Sievert H, Zeymer U, Ledwoch J, Ince H, **Thomas D**, Hochadel M, Senges J, Kirchhof P, Rillig A (2021). Impact of atrial fibrillation pattern on outcomes after left atrial appendage closure: lessons from the prospective LAARGE registry. *Clin Res Cardiol* doi: 10.1007/s00392-021-01874-3

Kany S, Brachmann J, Lewalter T, Kuck KH, Andresen D, Willems S, Hoffmann E, Eckardt L, **Thomas D**, Hochadel M, Senges J, Metzner A, Rillig A (2021) Safety and patient-reported outcomes in index ablation versus repeat ablation in atrial fibrillation: insights from the German Ablation Registry. *Clin Res Cardiol* 110: 841-850

Lugenbiel P, Govorov K, Syren P, Rahm AK, Wieder T, Wunsch M, Weiberg N, Manolova E, Gramlich D, Rivinius R, Finke D, Lehmann LH, Schweizer PA, Frank D, El Tahry FA, Bruehl C, Heimberger T, Sandke S, Weis T, Most P, Schmack B, Ruhparwar A, Karck M, Frey N, Katus HA, **Thomas D** (2021) Epigenetic regulation of cardiac electrophysiology in atrial fibrillation: HDAC2 determines action potential duration and suppresses NRSF in cardiomyocytes. *Basic Res Cardiol* 116:13

Odening KE, Gomez AM, Dobrev D, Fabritz L, Heinzl FR, Mangoni ME, Molina CE, Sacconi L, Smith G, Stengl M, **Thomas D**, Zaza A, Remme CA, Heijman J (2021). ESC working group on cardiac cellular electrophysiology position paper: relevance, opportunities, and limitations of experimental models for cardiac electrophysiology research. *Europace* doi: 10.1093/europace/euab142

Rahm AK, Gramlich D, Wieder T, Müller ME, Schoeffel A, El Tahry FA, Most P, Heimberger T, Sandke S, Weis T, Ullrich ND, Korff T, Lugenbiel P, Katus HA, **Thomas D** (2021) Trigger-specific remodeling of K_{Ca2} potassium channels in models of atrial fibrillation. *Pharmacogenomics Pers Med* 14: 579-590

Rahm AK, Helmschrott M, Darche FF, **Thomas D**, Bruckner T, Ehlermann P, Kreusser MM, Warnecke G, Frey N, Rivinius R. Newly acquired complete right bundle branch block early after heart transplantation is associated with lower survival. *ESC Heart Fail* doi: 10.1002/ehf2.13494

Rahm AK, Wieder T, Gramlich D, Müller ME, Wunsch MN, El Tahry FA, Heimberger T, Weis T, Most P, Katus HA, **Thomas D**, Lugenbiel P (2021) HDAC2-dependent remodeling of $KCa2.2$ (KCNN2) and $KCa2.3$ (KCNN3) K^+ channels in atrial fibrillation with concomitant heart failure. *Life Sci* 266: 118892

Rahm AK, Wieder T, Gramlich D, Müller ME, Wunsch MN, El Tahry FA, Heimberger T, Sandke S, Weis T, Most P, Katus HA, **Thomas D**, Lugenbiel P (2021) Differential regulation of $KCa2.1$ (KCNN1) K^+ channel expression by histone deacetylases in atrial fibrillation with concomitant heart failure. *Physiol Rep* 9: e14835

Schmidt C, Benda S, Kraft P, Wiedmann F, Pleger S, Büscher A, **Thomas D**, Wachter R, Schmid C, Eils R, Katus HA, Kallenberger SM (2021) Prospective multicentric validation of a novel prediction model for paroxysmal atrial fibrillation. *Clin Res Cardiol* 110: 868-876

Syren P, Rahm AK, Schweizer PA, Bruehl C, Katus HA, Frey N, **Thomas D**, Lugenbiel P (2021). Histone deacetylase 2-dependent ventricular electrical remodeling in a porcine model of early heart failure. *Life Sci* doi: 10.1016/j.lfs.2021.119769

Wagner L, Darche FF, **Thomas D**, Lugenbiel P, Xynogalos P, Seide S, Scholz EP, Katus HA, Schweizer PA (2021) Cryoballoon pulmonary vein isolation-mediated rise of sinus rate in patients with paroxysmal atrial fibrillation. *Clin Res Cardiol* 110: 124- 135 Zylla MM, Merle U, Vey JA, Korosoglou G, Hofmann E, Müller M, Herth F, Schmidt W, Blessing E, Göggelmann C, Weidner N, Fiedler MO, Weigand MA, Kälble F, Morath C, Leiner J, Kieser M, Katus HA, **Thomas D** (2021) Predictors and prognostic implications of cardiac arrhythmias in patients hospitalized for COVID-19. *J Clin Med* 10: 133

2020

Baumann S, Grau A, Senges J, Schneider S, Alonso A, Katus HA, **Thomas D**, Waldecker B, Haass M, Zahn R, Zeymer U, Akin I, Kruska M, Fischer C, Borggrefe M (2020) ARENA-Project atrial fibrillation in the Rhein-Neckar region. *Herz* 45: 689- 695

Darche FF, Rivinius R, Rahm AK, Köllensperger E, Leimer U, Germann G, Reiss M, Koenen M, Katus HA, **Thomas D**, Schweizer PA (2020) In vivo cardiac pacemaker function of differentiated human mesenchymal stem cells from adipose tissue transplanted into porcine hearts. *World J Stem Cells* 12:1133-1151

Rahm AK, Lugenbiel P, Ochs M, Meder B, **Thomas D**, Katus HA, Scholz E (2020) Pulmonary vein isolation treats symptomatic AF in a patient with Lamin A/C mutation: case report and review of the literature. *Clin Res Cardiol* 109: 1070-1075

Rahm AK*, Müller ME*, Gramlich D, Lugenbiel P, Uludag E, Rivinius R, Ullrich ND, Schmack B, Ruhparwar A, Heimberger T, Weis T, Karck M, Katus HA, **Thomas D** (2020) Inhibition of cardiac $K_v4.3$ (I_{to}) channel isoforms by class I antiarrhythmic drugs lidocaine and mexiletine. *Eur J Pharmacol* 880: 173159

Rahm AK, Wieder T, Gramlich D, Müller ME, Wunsch MN, El Tahry FA, Heimberger T, Weis T, Most P, Katus HA, **Thomas D**, Lugenbiel P (2020) HDAC2-dependent remodeling of $K_{Ca2.2}$ (KCNN2) and $K_{Ca2.3}$ (KCNN3) K^+ channels in atrial fibrillation with concomitant heart failure. *Life Sci* 266:118892

Rivinius R, Helmschrott M, Ruhparwar A, Schmack B, Darche FF, Thomas D, Bruckner T, Doesch AO, Katus HA, Ehlermann P (2020) Elevated pre-transplant pulmonary vascular resistance is associated with early post-transplant atrial fibrillation and mortality. *ESC Heart Fail* 7: 176-187

Senn K, Zitron E, Katus HA, **Thomas D**, Ullrich C, Rahm AK (2020) Die Lebensqualität von Patienten mit implantierbarem Kardioverter-Defibrillator aus salutogenetischer Sicht: Eine qualitative Studie der kardiologischen Versorgungsforschung [Quality of life in patients with

implantable cardioverter- defibrillator from a salutogenic perspective: A qualitative study in cardiologic health service research]. *Herzschrittmacherther Elektrophysiol*. 31: 301-306

Wiedmann F, Beyersdorf C, Zhou X, Büscher A, Kraft M, Nietfeld J, Walz TP, Unger LA, Loewe A, Schmack B, Ruhparwar A, Karck M, **Thomas D**, Borggrefe M, Seemann G, Katus HA, Schmidt C (2020) Pharmacologic TWIK-related acid- sensitive K⁺ channel (TASK-1) potassium channel onhibitor A293 facilitates acute cardioversion of paroxysmal atrial fibrillation in a porcine large animal model. *J Am Heart Assoc*. 9: e015751

Wiedmann F, Schlund D, Kraft M, Nietfeld J, Katus HA, Schmidt C, **Thomas D** (2020) Electrophysiological effects of non-vitamin K antagonist oral anticoagulants on atrial repolarizing potassium channels. *Europace* 22: 1409-1418

Zylla MM, Brachmann J, Lewalter T, Kuck KH, Andresen D, Willems S, Spitzer SG, Straube F, Schumacher B, Eckardt L, Hochadel M, Senges J, Katus HA, **Thomas D** (2020) Symptomatic arrhythmias after catheter ablation of atrioventricular nodal reentrant tachycardia (AVNRT): results from the German Ablation Registry. *Clin Res Cardiol* 109: 858-868

Zylla MM, Hochadel M, Andresen D, Brachmann J, Eckardt L, Hoffmann E, Kuck KH, Lewalter T, Schumacher B, Spitzer SG, Willems S, Senges J, Katus HA, **Thomas D** (2020) Ablation of atrial fibrillation in patients with hypertension-an analysis from the German Ablation Registry. *J Clin Med* 9: 2402

2019

Busch S, Eckardt L, Sommer P, Meyer C, Bonnemeier H, **Thomas D**, Neuberger HR, Tilz RR, Steven D, von Bary C, Kuniss M, Voss F, Estner HL (2019) Premature ventricular contractions and tachycardia in a structurally normal heart: Idiopathic PVC and VT. *Herzschrittmacherther Elektrophysiol* 30: 212-224

Darche FF, Rivinius R, Köllensperger E, Leimer U, Germann G, Seckinger A, Hose D, Schröter J, Bruehl C, Draguhn A, Gabriel R, Schmidt M, Koenen M, Thomas D, Katus HA, Schweizer PA (2019) Pacemaker cell characteristics of differentiated and HCN4-transduced human mesenchymal stem cells. *Life Sci* 232: 116620

Frommeyer G, Brachmann J, Ince H, Spitzer SG, **Thomas D**, Willems S, Schumacher B, Schirdewahn P, Lewalter T, Hochadel M, Senges J, Eckardt L (2019) Digitalis therapy is associated with higher comorbidities and poorer prognosis in patients undergoing ablation of atrial arrhythmias: data from the German Ablation Registry. *Clin Res Cardiol* 108: 1083-1092

Gessner G, Runge S, Koenen M, Heinemann SH, Koenen M, Haas J, Meder B, **Thomas D**, Katus HA, Schweizer PA (2019) ANK2 functionally interacts with KCNH2 aggravating long QT syndrome in a double mutation carrier. *Biochem Biophys Res Commun* 512: 845-851

Rapp F, Simoniello P, Wiedemann J, Bahrami K, Grünebaum V, Ktitareva S, Durante M, Lugenbiel P, **Thomas D**, Lehmann HI, Packer DL, Graeff C, Fournier C (2019) Biological cardiac tissue effects of high-energy heavy ions - investigation for myocardial ablation. *Sci Rep* 9: 5000

Rivinius R, Helmschrott M, Rahm AK, Darche FF, **Thomas D**, Bruckner T, Doesch AO, Ehlermann P, Katus HA, Zitron E. Risk factors and survival of patients with permanent pacemaker implantation after heart transplantation (2019) *J Thorac Dis* 11: 5440-5452

Schmidt C, Wiedmann F, Beyersdorf C, Zhao Z, El-Battrawy I, Lan H, Szabo G, Li X, Lang S, Korkmaz-Icöz S, Rapti K, Jungmann A, Ratte A, Müller OJ, Karck M, Seemann G, Akin I, Borggreffe M, Zhou XB, Katus HA, **Thomas D** (2019) Genetic ablation of TASK-1 (tandem of P domains in a weak inward rectifying K⁺ channel- related acid-sensitive K⁺ channel-1) (K_{2P}3.1) K⁺ channels suppresses atrial fibrillation and prevents electrical remodeling. *Circ Arrhythm Electrophysiol* 12: e007465

Staudacher I, Seehausen S, Illg C, Lugenbiel P, Schweizer PA, Katus HA, **Thomas D** (2019) Cardiac K_{2P}13.1 (THIK-1) two-pore-domain K⁺ channels: pharmacological regulation and remodeling in atrial fibrillation. *Prog Biophys Mol Biol* 144: 128-138

Staudacher I, Seehausen S, Gierten J, Illg C, Schweizer PA, Katus HA, **Thomas D** (2019) Cloning and characterization of zebrafish K_{2P}13.1 (THIK-1) two-pore-domain K⁺ channels. *J Mol Cell Cardiol* 126: 96-104

Thomas D, Christ T, Fabritz L, Goette A, Hammwöhner M, Heijman J, Kockskämper J, Linz D, Odening KE, Schweizer PA, Wakili R, Voigt N (2019) German Cardiac Society Working Group on Cellular Electrophysiology state-of-the-art paper: impact of molecular mechanisms on clinical arrhythmia management. *Clin Res Cardiol* 108: 577-599

Van den Bruck JH, Sultan A, Lüker J, **Thomas D**, Willems S, Weinmann K, Kuniss M, Hochadel M, Senges J, Andresen D, Brachmann J, Kuck KH, Tilz R, Steven D (2019) Remote vs. conventional navigation for catheter ablation of atrial fibrillation: insights from prospective registry data. *Clin Res Cardiol* 108: 298-308

Weigl I, Geschwill P, Reiss M, Bruehl C, Draguhn A, Koenen M, Sedaghat-Hamedani F, Meder B, **Thomas D**, Katus HA, Schweizer PA (2019) The C-terminal HCN4 variant P883R alters channel properties and acts as genetic modifier of atrial fibrillation and structural heart disease. *Biochem Biophys Res Commun* 519: 141- 147

Wiedmann F, Schlund D, Faustino F, Kraft M, Ratte A, **Thomas D**, Katus HA, Schmidt C (2019) N-glycosylation of TREK-1/hK_{2P}2.1 two-pore-domain potassium (K_{2P}) channels. *Int J Mol Sci* 20: 5193

Xynogalos P, Lugenbiel P, Schweizer P, Katus H, Thomas D, Scholz EP (2019) Butterfly and reverse butterfly: usefulness of a resistance band to provoke exercise- induced arrhythmias during catheter ablation in a patient refractory to pharmacological stimulation. *Clin Res Cardiol* 108: 110-113

Yampolsky P, Koenen M, Mosqueira M, Geschwill P, Nauck S, Witzemberger M, Seyler C, Fink T, Kruska M, Bruehl C, Schwoerer AP, Ehmke H, Fink RHA, Draguhn A, **Thomas D**, Katus HA, Schweizer PA (2019) Augmentation of myocardial I_f dysregulates calcium homeostasis and causes adverse cardiac remodeling. *Nat Commun* 10: 3295

2018

Eckardt L, Frommeyer G, Sommer P, Steven D, Deneke T, Estner HL, Kriatselis C, Kuniss M, Busch S, Tilz RR, Bonnemeier H, von Bary C, Voss F, Meyer C, **Thomas D**, Neuberger HR (2018) Updated survey on interventional electrophysiology: 5-year follow-up of infrastructure, procedures, and training positions in Germany. *JACC Clin Electrophysiol* 4: 820-827

El-Battrawy I, Zhao Z, Lan H, Li X, Yücel G, Lang S, Sattler K, Schünemann JD, Zimmermann WH, Cyganek L, Utikal J, Wieland T, Bieback K, Bauer R, Ratte A, Pribe-Wolferts R, Rapti K, Nowak D, Wittig J, **Thomas D**, Most P, Katus HA, Ravens U, Schmidt C, Borggreffe M, Zhou XB, Müller OJ, Akin I (2018) Ion channel dysfunctions in dilated cardiomyopathy in limb-girdle muscular dystrophy. *Circ Genom Precis Med* 11: e001893

Lugenbiel P, Xynogalos P, Schweizer P, Katus HA, **Thomas D**, Scholz EP (2018) Successful localization and ablation of a Mahaim potential using a high-resolution mapping catheter after a failed conventional ablation attempt. *Clin Res Cardiol* 107: 607-610

Lugenbiel P, Govorov K, Rahm AK, Wieder T, Gramlich D, Syren P, Weiberg N, Seyler C, Katus HA, **Thomas D** (2018) Inhibition of histone deacetylases induces K⁺ channel remodeling and action potential prolongation in HL-1 atrial cardiomyocytes. *Cell Physiol Biochem* 49: 65-77

Rahm AK, Lugenbiel P, Schweizer PA, Katus HA, **Thomas D** (2018) Role of ion channels in heart failure and channelopathies. *Biophys Rev* 10: 1097-1106

Rahm AK, Katus HA, **Thomas D** (2018) Atrial fibrillation. In: Thomas D, Remme CA (eds.), *Channelopathies in heart disease, Cardiac and vascular biology*, doi: 10.1007/978-3-3-319-77819-9_12. Springer Nature.

Remme CA, **Thomas D** (2018) Channelopathies in heart disease – introduction and book overview. In: Thomas D, Remme CA (eds.), *Channelopathies in heart disease, Cardiac and vascular biology*, doi: 10.1007/978-3-3-319-77819-9_1. Springer Nature

Rivinius R, Helmschrott M, Ruhparwar A, Rahm AK, Darche FF, **Thomas D**, Bruckner T, Ehlermann P, Katus HA, Doesch AO (2018) Control of cardiac chronotropic function in patients after heart transplantation: effects of ivabradine and metoprolol succinate on resting heart rate in the denervated heart. *Clin Res Cardiol* 107: 138-147

Rivinius R, Helmschrott M, Ruhparwar A, Schmack B, Darche FF, **Thomas D**, Bruckner T, Katus HA, Ehlermann P, Doesch AO (2018) COPD in patients after heart transplantation is associated with a prolonged hospital stay, early posttransplant atrial fibrillation, and impaired posttransplant survival. *Clin Epidemiol* 10: 1359-1369

Schmidt C, Wiedmann F, Gaubatz AR, Ratte A, Katus HA, **Thomas D** (2018) New targets for old drugs: cardiac glycosides inhibit atrial-specific K_{2P3.1} (TASK-1) channels. *J Pharmacol Exp Ther* 365: 614-623

Schmidt C, Wiedmann F, El-Battrawy I, Fritz M, Ratte A, Beller CJ, Lang S, Rudic B, Schimpf R, Akin I, Karck M, Borggreffe M, Katus HA, Zhou XB, **Thomas D** (2018) Reduced Na⁺ current in native cardiomyocytes of a Brugada syndrome patient associated with β -2-syntrophin mutation. *Circ Genom Precis Med* 11: e002263

Scholz EP, Fischer P, Lugenbiel P, Xynogalos P, Schweizer PA, Scherer D, **Thomas D**, Katus HA, Zitron E (2018) Novel approach to discriminate left bundle branch block from nonspecific intraventricular conduction delay using pacing-induced functional left bundle branch block. *J Interv Card Electrophysiol* 53: 347-355

Staudacher I, Illg C, Gierten J, Seehausen S, Schweizer PA, Katus HA, **Thomas D** (2018) Identification and functional characterization of zebrafish $K_{2P17.1}$ (TASK-4, TALK-2) two-pore-domain K^+ channels. *Eur J Pharmacol* 831: 94-102

Staudacher S, Illg C, Chai S, Deschenes I, Seehausen S, Gramlich D, Müller ME, Wieder T, Rahm AK, Mayer C, Schweizer PA, Katus HA, **Thomas D** (2018) Cardiovascular pharmacology of $K_{2P17.1}$ (TASK-4, TALK-2) two-pore-domain K^+ channels. *Naunyn Schmiedebergs Arch Pharmacol* 391: 1119-1131

Voigt N, Mason F, **Thomas D** (2018) Report on the Ion Channel Symposium organized by the German Cardiac Society Working Group on Cellular Electrophysiology (AG 18). *Herzschrittmacherther Elektrophysiol* 29: 4-13

Wiedmann F, Schulte JS, Gomes B, Zafeiriou MP, Ratte A, Rathjens F, Fehrmann E, Scholz B, Voigt N, Müller FU, **Thomas D**, Katus HA, Schmidt C (2018) Atrial fibrillation and heart failure-associated remodeling of two-pore-domain potassium (K_{2P}) channels in murine disease models: focus on TASK-1. *Basic Res Cardiol* 113: 27

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