

Curriculum Vitae

Michael Potente, MD

Current position:

Group leader and cardiologist

Address:

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Academic education

10/1996 – 12/2002 Studies of Medicine, Goethe-University Frankfurt, and University of Toronto, Toronto, ON, Canada
09/1998 – 04/2003 Experimental doctoral thesis (MD student), Goethe-University, Frankfurt

Scientific degrees

MD thesis: Department of Cardiovascular Physiology (Prof. Dr. R. Busse), Goethe-University, Frankfurt, 04/2003 (summa cum laude)
Board Certification: Internal Medicine (2011) and Cardiology (2011), Department of Internal Medicine III, Cardiology, Goethe-University, Frankfurt
Habilitation: Department of Internal Medicine III, Cardiology, Goethe-University, Frankfurt, 06/2013

Professional career

01/2003 – 06/2004 Intern, Department of Internal Medicine III (Prof. Dr. A.M. Zeiher), Cardiology, Goethe-University, Frankfurt
05/2003 – 07/2007 Postdoctoral training, Institute for Cardiovascular Regeneration (Prof. Dr. S. Dimmeler), Centre for Molecular Medicine, Goethe-University, Frankfurt
07/2004 – 09/2011 Resident, Department of Internal Medicine III, Cardiology (Prof. Dr. A.M. Zeiher), Goethe-University, Frankfurt
10/2011 – 11/2012 Senior physician, Department of Internal Medicine III, Cardiology, Goethe-University, Frankfurt
12/2012 – present Max Planck Research Group Leader, Max Planck Institute for Heart and Lung Research, Bad Nauheim
01/2013 – present Consultant cardiologist, Department of Internal Medicine III, Cardiology, Goethe-University, Frankfurt

Awards & honors

2003 Young Investigator Award, Goethe-University, Faculty of Medicine
2004 Best Thesis Award, Goethe-University, Faculty of Medicine

2006	Award of the Dr. Walter and Luise Freundlich Foundation
2007	Melvin L. Marcus Young Investigator Award in Basic Cardiovascular Sciences finalist, American Heart Association
2009	Louis N. and Arnold M. Katz Basic Science Research Prize, American Heart Association
2009	Award of the Herbert and Hedwig Eckelmann Foundation
2011	Principle investigator, Excellence Cluster Cardiopulmonary System
2011	Principal Investigator, German Centre for Cardiovascular Research
2012	Adjunct Investigator, Cluster of Excellence Frankfurt Macromolecular Complexes
2012	Albert Fraenkel Prize of the German Cardiac Society
2012	Editorial board member Circulation Research
2012	Award of the Dr. Paul und Cilli Weill-Foundation
2012	European Research Council Starting Grant
2012	Award of the Theodor Stern Foundation
2014	EMBO Young Investigator Programme

Research funding

2004 – 2005	Goethe-University, Faculty of Medicine, Young Investigator Grant
2007 – 2009	Deutsche Forschungsgemeinschaft, Individual Research Grant
2010 – 2013	Deutsche Forschungsgemeinschaft, SFB834
2011 – 2015	German Centre for Cardiovascular Research
2012 – 2013	Cluster of Excellence Frankfurt Macromolecular Complexes
2012 – 2013	Leducq Transatlantic Network of Excellence (ARTEMIS)
2012 – 2017	Max Planck Society, Max Planck Research Group
2012 – 2017	European Research Council Starting Grant (ANGIOMET)
2012 – 2017	BELSPO, IAP Phase VII (ICePath)
2014 – 2016	LOEWE Research Cluster (Ub-Net)
2014 – 2017	Deutsche Forschungsgemeinschaft, SFB834
2015 – 2017	EMBO Young Investigator Programme

Citation metrics (ISI Web of Knowledge)

Publications: **24** – total citations: **2946** – average citations per item: **122.8** – h-index: **18**

Editorial activities

2012 – present Circulation Research

Solicited reviewer for journals

Science, Nature Medicine, Journal of Clinical Investigation, Circulation, Circulation Research, Blood, EMBO Molecular Medicine, Nature Communications, Journal of the National Cancer Institute, European Heart Journal, Arteriosclerosis, Thrombosis, and Vascular Biology, Cancer Research, FASEB Journal, Basic Research in Cardiology, PLoS ONE, European Journal of Cancer, Diabetes

Solicited reviewer for grants

European Research Council (ERC), EMBO, Deutsche Forschungsgemeinschaft (DFG), The Netherlands Organisation for Scientific Research (NWO), The National Fund for Scientific Research (FWO, Belgium), Deutsche Krebshilfe

Lectures at meetings, institutes and universities

2008 Keystone Symposia, Molecular Mechanisms of Angiogenesis in Development and Disease, Vancouver, BC, Canada

2008 London Research Institute (host: H. Gerhardt), Cancer Research UK, London, UK

2008 Vesalius Research Center (host P. Carmeliet), VIB and K.U. Leuven, Belgium

2009 IDIBELL Cancer Conferences on Sirtuins, Barcelona, Spain

2009 Sirtris Pharmaceuticals, Cambridge, MA, USA

2009 EPFL (host: J. Auwerx), Lausanne, Switzerland

2010 EMBL (host: N. Rosenthal), Monterotondo, Italy

2010 IAPVI-28 Spring Meeting, Signal Integration Mechanisms in Health and Disease, Gembloux, Belgium

2010 Max Planck Institute for Molecular Biomedicine (host: R. Adams), Münster, Germany

2010 6th International Kloster Seeon Meeting, Angiogenesis: Molecular Mechanisms and Functional Interactions, Kloster Seeon, Germany

2010 Sirtris Pharmaceuticals, Cambridge, MA, USA

2011 Barts Cancer Institute (host: K. Hodivala-Dilke), Barts and The London School of Medicine and Dentistry, London, UK

2011 University of Massachusetts, Medical School (host: N. Lawson), Worcester, MA, USA

2011 IDIBELL Cancer Conferences on Metastasis and Angiogenesis, Barcelona, Spain

2011 Gordon Research Conference, Angiogenesis, Newport, RI, USA

2011 Joint Meeting of the European Society of Microcirculation (ESM) and Society of Microcirculation and Vascular Biology, Munich, Germany

2011 Vesalius Research Center (host: P. Carmeliet), VIB and K.U. Leuven, Leuven, Belgium

2011 IFOM-IEO (host: E. Dejana), Milan, Italy

2012 International Vascular Biology Meeting, Wiesbaden, Germany

2012 Cell Symposia, Angiogenesis, Metabolic Regulation, and Cancer Biology, Leuven, Belgium

2012 Gordon Research Conference, Notch Signaling in Development, Regeneration and Disease, Lewiston, ME, USA

2012 7th International Kloster Seeon Meeting, Angiogenesis: Molecular Mechanisms and Functional Interactions, Kloster Seeon, Germany

2013 Hannover Medical School Symposium, Blood vessels in development and disease, Hannover, Germany

2013	11 th Dutch-German Joint Meeting of the Molecular Cardiology Working Groups, Heidelberg, Germany
2013	SFB / TR23 Kickoff Meeting, Vascular Differentiation and Remodelling, University of Heidelberg, Germany
2013	Gordon Research Conference, Angiogenesis, Newport, RI, USA
2013	FASB meeting, HDACs, Sirtuins, and Reversible Acetylation in Signaling and Disease, Lucca, Italy
2013	SFB914, Trafficking of Immune Cells in Inflammation, Development and Disease, Ludwig-Maximilians-University, Munich, Germany
2013	Symposium, Cells, Genes and Molecules in Cardiac and Vascular Regeneration, Menaggio, Italy
2014	Keystone Symposia, Metabolism and Angiogenesis, Whistler, BC, Canada
2014	5 ^{eme} Congres de la Societe Francaise d'Angiogenese, Chamonix, France
2014	International Vascular Biology Meeting, Kyoto, Japan
2014	8 th International Kloster Seeon Meeting, Angiogenesis: Molecular Mechanisms and Functional Interactions, Kloster Seeon, Germany
2014	University Medical Center Utrecht (host: B. Burgering), Utrecht, Netherlands
2014	EMBO / EMBL Symposium: Frontiers in Metabolism: From Molecular Physiology to Systems Medicine, Heidelberg, Germany
2014	University of Lausanne (host: T. Petrova), Lausanne, Switzerland
2014	Max Delbrück Center for Molecular Medicine (host: H. Gerhardt), Berlin, Germany
2015	FASEB meeting, HDACs, Sirtuins and Reversible Lysine Modifications, Berlin Germany

Publications

1. Fisslthaler B, Popp R, Kiss L, **Potente M**, Harder DR, Fleming I, Busse R (1999) Cytochrome P450 2C is an EDHF synthase in coronary arteries. *Nature* 401: 493-497
2. **Potente M**, Michaelis UR, Fisslthaler B, Busse R, Fleming I (2002) Cytochrome P450 2C9-induced endothelial cell proliferation involves induction of mitogen-activated protein (MAP) kinase phosphatase-1, inhibition of the c-Jun N-terminal kinase, and up-regulation of cyclin D1. *The Journal of Biological Chemistry* 277: 15671-15676
3. **Potente M**, Fisslthaler B, Busse R, Fleming I (2003) 11,12-Epoxyeicosatrienoic acid-induced inhibition of FOXO factors promotes endothelial proliferation by down-regulating p27Kip1. *The Journal of Biological Chemistry* 278: 29619-29625
4. Urbich C, Knau A, Fichtlscherer S, Walter DH, Bruhl T, **Potente M**, Hofmann WK, de Vos S, Zeiher AM, Dimmeler S (2005) FOXO-dependent expression of the proapoptotic protein Bim: pivotal role for apoptosis signaling in endothelial progenitor cells. *FASEB journal* 19: 974-976
5. Rossig L, Urbich C, Bruhl T, Dernbach E, Heeschen C, Chavakis E, Sasaki K, Aicher D, Diehl F, Seeger F, **Potente M**, Aicher A, Zanetta L, Dejana E, Zeiher AM, Dimmeler S (2005)

Histone deacetylase activity is essential for the expression of HoxA9 and for endothelial commitment of progenitor cells. *The Journal of Experimental Medicine* 201: 1825-1835

6. **Potente M**, Urbich C, Sasaki K, Hofmann WK, Heeschen C, Aicher A, Kollipara R, DePinho RA, Zeiher AM, Dimmeler S (2005) Involvement of Foxo transcription factors in angiogenesis and postnatal neovascularization. *The Journal of Clinical Investigation* 115: 2382-2392
7. **Potente M**, Ghaeni L, Baldessari D, Mostoslavsky R, Rossig L, Dequiedt F, Haendeler J, Mione M, Dejana E, Alt FW, Zeiher AM, Dimmeler S (2007) SIRT1 controls endothelial angiogenic functions during vascular growth. *Genes & Development* 21: 2644-2658
8. Martin M*, **Potente M***, Janssens V, Vertommen D, Twizere JC, Rider MH, Goris J, Dimmeler S, Kettmann R, Dequiedt F (2008) Protein phosphatase 2A controls the activity of histone deacetylase 7 during T cell apoptosis and angiogenesis. *Proceedings of the National Academy of Sciences of the United States of America* 105: 4727-4732
9. Taddei A, Giampietro C, Conti A, Orsenigo F, Breviario F, Pirazzoli V, **Potente M**, Daly C, Dimmeler S, Dejana E (2008) Endothelial adherens junctions control tight junctions by VE-cadherin-mediated upregulation of claudin-5. *Nature Cell Biology* 10: 923-934
10. **Potente M**, Dimmeler S (2008) Emerging roles of SIRT1 in vascular endothelial homeostasis. *Cell Cycle* 7: 2117-2122
11. **Potente M**, Dimmeler S (2008) NO targets SIRT1: a novel signaling network in endothelial senescence. *Arteriosclerosis, Thrombosis, and Vascular Biology* 28: 1577-1579
12. Phng LK, **Potente M**, Leslie JD, Babbage J, Nyqvist D, Lobov I, Ondr JK, Rao S, Lang RA, Thurston G, Gerhardt H (2009) Nrarp coordinates endothelial Notch and Wnt signaling to control vessel density in angiogenesis. *Developmental Cell* 16: 70-82
13. Urbich C, Rossig L, Kaluza D, **Potente M**, Boeckel JN, Knau A, Diehl F, Geng JG, Hofmann WK, Zeiher AM, Dimmeler S (2009) HDAC5 is a repressor of angiogenesis and determines the angiogenic gene expression pattern of endothelial cells. *Blood* 113: 5669-5679
14. Bonauer A, Carmona G, Iwasaki M, Mione M, Koyanagi M, Fischer A, Burchfield J, Fox H, Doebele C, Ohtani K, Chavakis E, **Potente M**, Tjwa M, Urbich C, Zeiher AM, Dimmeler S (2009) MicroRNA-92a controls angiogenesis and functional recovery of ischemic tissues in mice. *Science* 324: 1710-1713
15. Guarani V, **Potente M** (2010) SIRT1 - a metabolic sensor that controls blood vessel growth. *Current Opinion in Pharmacology* 10: 139-145
16. **Potente M** (2010) An energy-sensor network takes center stage during endothelial aging. *Circulation Research* 106: 1316-1318
17. Guarani V, Deflorian G, Franco CA, Kruger M, Phng LK, Bentley K, Toussaint L, Dequiedt F, Mostoslavsky R, Schmidt MH, Zimmermann B, Brandes RP, Mione M, Westphal CH, Braun T, Zeiher AM, Gerhardt H, Dimmeler S, **Potente M** (2011) Acetylation-dependent regulation of endothelial Notch signalling by the SIRT1 deacetylase. *Nature* 473: 234-238
18. **Potente M**, Gerhardt H, Carmeliet P (2011) Basic and therapeutic aspects of angiogenesis. *Cell* 146: 873-887
19. Oellerich MF, **Potente M** (2012) FOXOs and Sirtuins in vascular growth, maintenance, and aging. *Circulation Research* 110: 1238-1251
20. Boon RA, Iekushi K, Lechner S, Seeger T, Fischer A, Heydt S, Kaluza D, Treguer K, Carmona G, Bonauer A, Horrevoets AJ, Didier N, Girmatsion Z, Biliczki P, Ehrlich JR, Katus HA, Muller OJ, **Potente M**, Zeiher AM, Hermeking H, Dimmeler S (2013) MicroRNA-34a regulates cardiac ageing and function. *Nature* 495: 107-110

21. Michaelis UR, Chavakis E, Kruse C, Jungblut B, Kaluza D, Wandzioch K, Manavski Y, Heide H, Santoni MJ, **Potente M**, Eble JA, Borg JP, Brandes RP (2013) The polarity protein Scrib is essential for directed endothelial cell migration. ***Circulation Research*** 112: 924-934
22. Graupera M, **Potente M** (2013) Regulation of angiogenesis by PI3K signaling networks. ***Experimental Cell Research*** 319: 1348-1355
23. Martin M, Geudens I, Bruyr J, **Potente M**, Bleuart A, Lebrun M, Simonis N, Deroanne C, Twizere JC, Soubeyran P, Peixoto P, Mottet D, Janssens V, Hofmann WK, Claes F, Carmeliet P, Kettmann R, Gerhardt H, Dequiedt F (2013) PP2A regulatory subunit Balpha controls endothelial contractility and vessel lumen integrity via regulation of HDAC7. ***The EMBO journal*** 32: 2491-2503
24. Doddaballapur A, Michalik KM, Manavski Y, Lucas T, Houtkooper RH, You Y, Chen W, Zeiher AM, **Potente M**, Dimmeler S, Boon RA. (2014) Laminar shear stress inhibits endothelial cell metabolism via KLF2-mediated repression of PFKFB3. ***Arterioscler Thromb Vasc Biol*** (*in press*)