

Ulrich Walter

CURRICULUM VITAE

(March 2017)

Last Name, First Name Walter, Ulrich
Academic title: Professor emeritus/ Senior Professor, M.D.
Born: 1949
Professional Address: Center for Thrombosis and Hemostasis (CTH)
University Medical Center,
Johannes Gutenberg-University (JGU) Mainz
Langenbeckstr. 1 (Geb. 708 / 3.OG)
55131 Mainz, Germany

Tel. / Fax-No.: +49 (0)6131/17-8215 / +49 (0)6131/17-3456
E-Mail: ulrich.walter@uni-mainz.de (new)
Institution: University Medical Center Mainz
Center / Department: Center for Thrombosis and Hemostasis (CTH)
www.cth-mainz.de



Specialties: Hemostaseology, Laboratory Medicine,
Internal Medicine, Clinical Biochemistry

Education / Appointments

1968 - 1975 Medical School, University of Göttingen, and Biochemical Studies
(Brandeis University, Mass., USA)

1975 Dissertation (MD), University of Göttingen, Laboratory Professor HD Söling,
Clinical Biochemistry

1975 - 1980 Postdoc / Research Associate, Pharmacology, Yale University, New Haven/USA;
Laboratory Professor Paul Greengard

1980 - 1985 Research Career Development Award (DFG Heisenberg-Fellowship), University of
Würzburg / University of Texas, Houston, USA

1985 Habilitation (Lecturer) Clinical Biochemistry (Prof. Dr. E. J. M. Helmreich, Prof. Dr.
K. Kochsiek), University of Würzburg

1985 - 1989 Resident / fellow, Medical University Clinic, Würzburg

1989 - 1995 Clinical Research Professor C3/C4 (DFG), Medical University Clinic Würzburg

1995 – 12/2011 University Professor (C4 & Chairman) Institute for Clinical Biochemistry and
Pathobiochemistry, University Hospital Würzburg

1989 / 2000 Board Certification, Internal Medicine/ Laboratory Medicine/ Hemostaseology

01/2012-09/2014 University Professor (W3) & Scientific Director, Centrum for Thrombosis and
Hemostasis (CTH), University Medical Center, Johannes Gutenberg-University
(JGU) Mainz

10/2014 - Professor emeritus / Senior Professor, Center for Thrombosis and Hemostasis
(CTH), University Medical Center, Johannes Gutenberg-University (JGU), Mainz

Additional Appointments

1985 - 1999	Founding member/group leader, DFG/SFB 176 Center Grant, "Signal transduction", University of Würzburg
1989 - 1995	Director (C3/C4-Professor) of a DFG Clinical Research Group "Cardiovascular Signal Transduction", University of Würzburg
1993 - 2004	Founding member, coordinator/ vice-coordinator, DFG/SFB 355 Center Grant, "Heart failure"
1995 - 1996	Acting Director, Forschungsinstitut f. Molekulare Pharmakologie (Berlin)
1996 - 2004	Founding member / vice-coordinator of the Interdisciplinary Center for Clinical Research (IZKF), University of Würzburg
2001 - 2011	Director, Central Laboratory/Clinical Chemistry, University Medical Center Würzburg
2004 - 2006	Member of the board of directors, University Medical Center Würzburg
2006 - 2013	Coordinator (until 2011) and project leader (until 2013) of the SFB 688 Center Grant "Cardiovascular Cell-Cell Interactions", Würzburg
2012 – 09/2014	Scientific Director, Center for Thrombosis and Hemostasis (CTH), Mainz
10/2014 -	Professor emeritus/Senior Professor, CTH, Mainz

Research Fields

- Molecular, cellular, and clinical topics in thrombosis & hemostasis
- Biochemistry, pharmacology, and pathobiochemistry of platelet receptors and signalling by protein kinases A and G (PKA/ PKG) and their substrates
- Proteomics and phosphoproteomics of human platelets
- Pathobiochemistry and cross-talk of NO/cGMP-mediated signalling in cardiovascular cells
- Structure, function, and cell biology of the Ena/VASP-protein family

Honors / Awards (Selection)

1971	Fulbright / Wien Fellowship
1975 - 1978	Postdoctoral Fellowship (DFG)
1980 - 1985	Heisenberg-Fellowship (DFG)
1989 - 1995	DFG-Clinical Research Professorship (C3/ C4)
1995	Smith Kline Beecham Foundation Award for clinical research,
2004	Elected Member, National Academy of Science, Leopoldina
2004 - 2012	Elected Member, DFG Grant study section "Medicine, Clinical Chemistry and Pathobiochemistry" (Re-election 2007)
2010	Congress President (with Prof. F. Rosendaal, Leiden), 1. Joint Thrombosis & Hemostasis Meeting GTH+NVTH, Nürnberg (www.gth-online.org)
2011- 2015	Vice-President GTH (Society for Thrombosis and Hemostasis)

Advisory Boards, Editorial Boards (Selection)

- 1996 - 2010** German Diabetes Research Institute (DFI), University of Düsseldorf
- 1998** Co-founder Vasopharm biotech GmbH (Würzburg); www.vasopharm.com
- 1998 - 2005** Scientific Advisory Board, Vasopharm biotech GmbH (Würzburg)
- 2000 - 2007** BMBF-Committee „Clinical Research Neue Bundesländer“
- 2003 - 2008** Editorial Boards J. Biol. Chem., Thrombosis and Hemostasis
- 2007 - 2011** Scientific Secretary, Foundation Pathobiochemistry & Molecular Diagnostics, DGKL
- 2009 - 2011** Editorial Board, J. Thromb. Hemostasis
- 2010 - 2014** Scientific Advisory Board, Max Planck Institute for Heart and Lung Research, Bad Nauheim (Germany)
- 2011-2014** Scientific Advisory Board, Leipzig Research Center for Metabolic Diseases (LIFE) University of Leipzig

Scientific Societies (Selection)

AHA (American Heart Association); ASBMB (American Society of Biochemistry and Molecular Biology); DGIM (Dt. Ges. f. Innere Medizin); GBM (Ges. f. Biochemie & Molekularbiologie); GTH (Ges. f. Thrombose und Hämostase); DGK / ESC (Dt. Ges. f. Kardiologie / European Society of Cardiology); DGKL (Dt. Vereinte Ges. f. Klinische Chemie und Laboratoriumsmedizin (DGKL)); ISTH (Intern. Society Thrombosis & Hemostasis); Nationale Akademie der Wissenschaften Leopoldina.

Major Grants (Selection, since 2006)

- 2006 – 2013** DFG/SFB 688 Center grant „Cardiovascular cell-cell interactions“ (U Walter, Coordinator 2006 - 2011, Project Investigator 2006-2013)
- 2009 - 2012** BMBF Network Project, SARA (Systems biology of PGI₂ and ADP P₂Y₁₂ receptor signalling [A Sickmann (Dortmund), U Walter, Coordinators])
- 2011 - 2015** BMBF Professorship for “Translational Research in Thrombosis and Hemostasis” including funds for junior groups and research laboratories (for the CTH Mainz)

Additional projects supported by the DFG, BMBF and Foundations until 12/2017.

Mainz, March 2017

Professor Dr. med. Ulrich Walter
Professor emeritus

Selected publications since 2012 (Complete publication list available on request)

(Currently > 245 original papers, > 25 refereed reviews; > 30 book chapters; 5 patents)

Burkhardt JM, Vaudel M, Gambaryan S, Radau S, **Walter U**, Martens L, Geiger J, Sickmann A, Zahedi RP. The first comprehensive and quantitative analysis of human platelet protein composition allows the comparative analysis of structural and functional pathways. *Blood*. 2012; 120: e73-82.

Gambaryan S, Subramanian H, Rukoyatkina N, Herterich S, **Walter U** Soluble guanylyl cyclase is the only enzyme responsible for cyclic guanosine monophosphate synthesis in human platelets. *Thromb Haemost*. 2013; 109(5):973-975.

Subramanian H, Zahedi R, Sickmann A, **Walter U**, Gambaryan S Phosphorylation of CalDAG-GEFI by Protein Kinase A prevents Rap1b activation. *J Thromb Haemost*. 2013; 11: 1574-1582.

Beck F, Geiger J, Gambaryan S, Veit J, Vaudel M, Nollau P, Kohlbacher O, Martens L, **Walter U**, Sickmann A, Zahedi RP. Time-resolved characterization of camp/pka-dependent signaling reveals that platelet inhibition is a concerted process involving multiple signaling pathways. *Blood* 2014;123: e1-e10

Burkhardt JM, Gambaryan S, Watson SP, Jurk K, **Walter U**, Sickmann A, Heemskerk JWM, Zahedi RP. What Can Proteomics Tell Us About Platelets? *Circulation Research* 2014; 114:1204-1219 (review)

Hubertus K, Mischnik M, Timmer J, Herterich S, Mark R, Moulard M, **Walter U** and Geiger J. Reciprocal regulation of human platelet function by endogenous prostanoids and through multiple prostanoid receptors. *Eur J Pharmacol*. 2014; 740:15-27

Navdaev A, Subramanian H, Petunin A, Clemetson KJ, Gambaryan S and **Walter U**. Echinectin Coated Polystyrene Beads: A Novel Tool to Investigate GPIb-Specific Platelet Activation and Aggregation. *Plos One*. 2014;9.

Reiss C, Mindukshev I, Bischoff V, Subramanian H, Kehrer L, Friebe A, Stasch JP, Gambaryan S and **Walter U**. The sGC stimulator riociguat inhibits platelet function in washed platelets but not in whole blood. *Brit J Pharmacol*. 2015; 172:5199-5210

Manukyan D, Muller-Calleja N, Jackel S, Luchmann K, Monnikes R, Kiouptsi K, Reinhardt C, Jurk K, **Walter U** and Lackner KJ. Cofactor-independent human antiphospholipid antibodies induce venous thrombosis in mice. *J Thromb Haemost*. 2016; 14:1011-20

Gambaryan S, Subramanian H, Kehrer L, Mindukshev I, Sudnitsyna J, Reiss C, Rukoyatkina N, Friebe A, Sharina I, Martin E and **Walter U**. Erythrocytes do not activate purified and platelet soluble guanylate cyclases even in conditions favourable for NO synthesis. *Cell Commun Signal*. 2016; 14:16.

Benz PM, Laban H, Zink J, Gunther L, **Walter U**, Gambaryan S and Dib K. Vasodilator-Stimulated Phosphoprotein (VASP)-dependent and -independent pathways regulate thrombin-induced activation of Rap1b in platelets. *Cell Commun Signal*. 2016; 14:21.

Beck F, Geiger J, Gambaryan S, Solari FA, Dell'Aica M, Loroeh S, Mattheij NJ, Mindukshev I, Potz O, Jurk K, Burkhardt JM, Fufezan C, Heemskerk JW, **Walter U**, Zahedi RP and Sickmann A. Temporal quantitative phosphoproteomics of ADP stimulation reveals novel central nodes in platelet activation and inhibition. *Blood*. 2017;129: e1-e12.

Kossmann S, Lagrange J, Jackel S, Jurk K, Ehken M, Schonfelder T, Weihert Y, Knorr M, Brandt M, Xia N, Li H, Daiber A, Oelze M, Reinhardt C, Lackner K, Gruber A, Monia B, Karbach SH, **Walter U**, Ruggeri ZM, Renne T, Ruf W, Munzel T and Wenzel P. Platelet-localized FXI promotes a vascular coagulation-inflammatory circuit in arterial hypertension. *Sci Transl Med*. 2017;9.

Loroeh S, Trabold K, Gambaryan S, Reiss C, Schwierczek K, Fleming I, Sickmann A, Behnisch W, Zieger B, Zahedi RP, **Walter U** and Jurk K. Alterations of the platelet proteome in type I Glanzmann thrombasthenia caused by different homozygous delG frameshift mutations in ITGA2B. *Thromb Haemost*. 2017; 117:556-569.