

Research Profile: Ulrich Pohl

General Information

Name: Ulrich Pohl, Prof.
Institution: Walter Brendel Centre of Experimental Medicine, Ludwig-Maximilians-Universität München (LMU Munich)

Academic Education

1970-1976 Medical School, LMU Munich
1977 Internship, Munich-Neuperlach Hospital

Academic Degrees

1978 Doctoral Thesis (MD)
1987 Habilitation, University Freiburg (PhD equivalent)

Positions held

since 2007 Director of the Walter-Brendel-Centre of Experimental Medicine
since 1999 Professor and Chair of Vegetative Physiology, Institute of Cardiovascular Physiology and Pathophysiology, LMU Munich
1995-1999 Professor of Physiology and Chairman, Institute of Physiology, Joh.-Gutenberg-University Mainz
1990 – 1995 Associate Professor, Institute of Physiology, Medical University of Lübeck
1982 – 1990 Assistant/associate Professor, Institute of Applied Physiology, University of Freiburg
1981 – 1982 Medical Service, German Airforce
1979 – 1981 Postdoctoral fellow, Institute of Physiology and Cardiology, University of Erlangen
1978 – 1979 Research associate, Max-Planck- Institute of Systemic Physiology, Dortmund

Honours and Awards

1991 Fraenkel-Award (German Circulatory Society)
2006 Malpighi Award (European Society of Microcirculation)
2015 Fellow of the American Physiological Society

Editorial activities

1996 - 2003 Chairman of the European Editorial Committee of „Physiological Reviews“
2003 - 2012 Associate editor of “Physiology”
since 2002 Editor in Chief, Journal of Vascular Research

Other professional activities

2006 President German Physiological Society
2006-2012 President and Executive committee member Federation of European Physiological Societies
2011-2012 President European Society of Microcirculation
2010-2013 Vicepresident of the LMU Munich
2013 Member of the Scientific Committee IUPS, The Physiological Society

Selected Publications (focusing on the topic of his lecture)

- Kameritsch P, Kiemer F, Beck H, Pohl U, Pogoda K. Cx43 increases serum induced filopodia formation via activation of p21-activated protein kinase 1. *Biochim Biophys Acta*. 2015; 1853(11 Pt A):2907-17.
- Pogoda K, Füller M, Pohl U, Kameritsch P. NO, via its target Cx37, modulates calcium signal propagation selectively at myoendothelial gap junctions. *Cell Commun Signal*. 2014 15;12:33.
- Kameritsch P, Khandoga N, Pohl U, Pogoda K. Gap junctional communication promotes apoptosis in a connexin-type-dependent manner. *Cell Death Dis*. 2013 11;4:e584.
- Kameritsch P, Pogoda K, Pohl U. Channel-independent influence of connexin 43 on cell migration. *Biochim Biophys Acta*. 2012 1818(8):1993-2001.
- Behrens J, Kameritsch P, Wallner S, Pohl U, Pogoda K. The carboxyl tail of Cx43 augments p38 mediated cell migration in a gap junction-independent manner. *Eur J Cell Biol*. 2010 89(11):828-38.
- Siegl D, Koeppen M, Wölflle SE, Pohl U, de Wit C. Myoendothelial coupling is not prominent in arterioles within the mouse cremaster microcirculation in vivo. *Circ Res*. 2005 14;97(8):781-8.
- Kameritsch P, Khandoga N, Nagel W, Hundhausen C, Lidington D, Pohl U. Nitric oxide specifically reduces the permeability of Cx37-containing gap junctions to small molecules. *J Cell Physiol*. 2005;203(1):233-42.
- Hoffmann A, Gloe T, Pohl U, Zahler S. Nitric oxide enhances de novo formation of endothelial gap junctions. *Cardiovasc Res*. 2003 1;60(2):421-30..
- de Wit C, Roos F, Bolz SS, Pohl U. Lack of vascular connexin 40 is associated with hypertension and irregular arteriolar vasomotion. *Physiol Genomics*. 2003 16;13(2):169-77.
- Zahler S, Hoffmann A, Gloe T, Pohl U. Gap-junctional coupling between neutrophils and endothelial cells: a novel modulator of transendothelial migration. *J Leukoc Biol*. 2003;73(1):118-26..
- Theis M, de Wit C, Schlaeger TM, Eckardt D, Krüger O, Döring B, Risau W, Deutsch U, Pohl U, Willecke K. Endothelium-specific replacement of the connexin43 coding region by a lacZ reporter gene. *Genesis*. 2001;29(1):1-13..
- de Wit C, Roos F, Bolz SS, Kirchhoff S, Krüger O, Willecke K, Pohl U. Impaired conduction of vasodilation along arterioles in connexin40-deficient mice. *Circ Res*. 2000 31;86(6):649-55..

Further publications (selected):

- Schneider H, Schubert KM, Blodow S, Kreutz CP, Erdogmus S, Wiedenmann M, Qiu J, Fey T, Ruth P, Lubomirov LT, Pfitzer G, Mederos Y, Schnitzler M, Hardie DG, Gudermann T, Pohl U. AMPK Dilates Resistance Arteries via Activation of SERCA and BKCa Channels in Smooth Muscle. *Hypertension*. 2015;66(1):108-16..
- Dietzel S, Pircher J, Nekolla AK, Gull M, Brändli AW, Pohl U, Rehberg M. Label-free determination of hemodynamic parameters in the microcirculation with third harmonic generation microscopy. *PLoS One*. 2014 16;9(6):e99615..
- Hennig T, Mogensen C, Kirsch J, Pohl U, Gloe T. Shear stress induces the release of an endothelial elastase: role in integrin $\alpha(v)\beta(3)$ -mediated FGF-2 release. *J Vasc Res*. 2011;48(6):453-64.
- Mogensen C, Bergner B, Wallner S, Ritter A, d'Avis S, Ninichuk V, Kameritsch P, Gloe T, Nagel W, Pohl U. Isolation and functional characterization of pericytes derived from hamster skeletal muscle. *Acta Physiol (Oxf)*. 2011;201(4):413-26.