Axel Radlach Pries

Geburtsdatum	20. Februar 1954**,** Köln, Deutschland
Adresse	Charité - Universitätsmedizin Berlin, Charitéplatz 1, 10117 Berlin
Telefon, Mail	+49 30 450 570 251; axel.pries@charite.de
Titel, Position	Professor für Physiologie und Dekan/Vorstandsmitglied der Charité

Ausbildung, Funktionen

1979	Medizinisches Staatsexamen, Universität zu Köln
2/1980	Promotion (Dr. med., summa cum laude)
1980	Wissenschaftlicher Assistent, Universität zu Köln
1985	Hochschul-Assistent (C1), Institut für Physiologie, Freie Universität Berlin (FU)
7/1990	Habilitation für Physiologie, FU
1991	Ober-Assistent (C2), Institut für Physiologie, FU
1995	Apl. Professor, Institut für Physiologie, FU
1997-1998	Oberarzt, Anästhesie, Deutsches Herzzentrum Berlin (DHZB)
12/1998	Professor (C3), Institut für Physiologie, FU
1984-2014	University of Arizona, Tucson, Consultant für NIH Projekte mit Tim Secomb, (jährlich ca. 1 Monat Forschungsaufenthalt an der UofA).

Leitungsfunktionen

2001-2015	Direktor, Institut für Physiologie, Charité-Berlin
2003-2015	Mitglied des Fakultätsrates, Charité-Berlin
2008-2015	Stellvertretender Zentrumsleiter, Centrum 02 (Vorklinik) Charité-Berlin
2009-2013	Stellvertretender Zentrumsleiter, Center for Cardiovascular Research, CCR
2014	Vorsitzender, 'Studienausschuss Modellstudiengang Medizin'
ab 2015	Dekan und Vorstandsmitglied, Charité-Berlin

Preise und Ehrungen

1980	Promotionspreis "Hochhausstiftung", Universität zu Köln
1986	Abbott Microcirculation Award, European Society for Microcirculation
1995	Lafon Hemorheology-Microcirculation Award, International Society for Clinical Haemorheology
2000	Fellow, European Society of Cardiology
2008	Visiting Fellowship, Isaac Newton Institute for Mathematical Sciences, Cambridge/UK
2008	Preis der Asian Union for Microcirculation
2011	Malpighi Award, European Society for Microcirculation
2015	William Harvey Basic Science Lecture and Silver Medal, European Society of Cardiology (ESC)
2015	Kitanomaru Award, 10th World Conf. for Microcirculation, Kyoto, Japan

Editorial boards: Mitgliedschaften

Cardiovascular Research (***associate editor***)
Journal of Vascular Research; Microcirculation; Pflügers Archive European Journal of Physiology; Biorheology; PLoS Computational Biology; The Keio Journal of Medicine, Journal of Cardiovascular Medicine; Frontiers in Vascular Physiology, Frontiers in Computational Physiology and Medicine; Bulletin of the Portuguese Society of Hemorheology and Microcirculation

Leitungsfunktionen in wissenschaftlichen Gesellschaften

European Society of Cardiology (ESC)	
Congress Programme Committee	
Coordinator for Basic Science	2005-2010; 2012-2014
Council on Basic Cardiovascular Science (CBCS)	
Nucleus	ab 2004
Chair	2010-2012
Frontiers of Cardiovascular Biology (FCVB), Chairperson	2010
Working Group on Coronary Pathophysiology and Microcirculation	
Nucleus	1994-2002; 2007-2012; 2014-2018
Chair	1998-2000
CardioScape	
Scientific Committee	2012-2014
Chair	ab 2015
European affairs committee	2014-2016
Advocacy committee	ab 2016
Alliance for Biomedical Research in Europe	ab 2016
Member of the Board of Directors	ab 2017
President	2018-2019
International Union of Physiological Societies (IUPS)	
Commission on Microcirculation and Capillary Transport	
Physiome and Bioengineering Committee	2004 -2010
European Society for Microcirculation (ESM)	
Strategy committee	1995-1998; 2011-2015
General Secretary	1998-2011
International Liaison Committee for Microcirculation (ILCM)	
Member	2000-2006, ab 2015
Chair	2006-2015
Gesellschaft für Mikrozirkulation	
Vorstand	1990-1994; 2011-2015
Schriftführer	1996-2011

Organisation

Konferenzen (Präsident und Organisation)	6
Symposien (Organisation)	45
Mitglied in ‚conference scientific program committees'	38

Wissenschaftliche Schwerpunkte

Mikrozirkulation, Organperfusion, Endotheliale Funktion, Endotheliale Oberfläche, vaskuläres Remodeling, Angiogenese, Tumor Mikrozirkulation, Blut-Rheologie

Kooperationen (ausgewählt)

Mark Dewhirst, Duke University, Durham, USA; David Boas, Havard University, Cambridge, USA; Klaus Ley, LIAI, San Diego, USA; Tim Secomb, University of Arizona, Tucson, USA; Saul Yedgar, Hebrew University, Jerusalem, Israel; Valentin Djonov, Universität Bern, Schweiz; Ferdi le Noble: KIT Karlsruhe, Deutschland.

Ausgewählte Publikationen (H-Index: 50, Zitationen > 8400)

Coronary microcirculatory pathophysiology: can we afford it to remain a black box? **Pries AR** and Reglin B. **European Heart Journal** 2017 Feb 14;38(7):478-488.

Coronary vascular regulation, remodelling, and collateralization: mechanisms and clinical implications on behalf of the working group on coronary pathophysiology and microcirculation. **Pries AR**, et al. **European Heart Journal** 2015; 36(45): 3134-3146.

Making microvascular networks work: angiogenesis, remodeling, and pruning. **Pries AR** and Secomb TW. **Physiology (Bethesda)** 2014; 29(6): 446-455.

Metabolic control of microvascular networks: oxygen sensing and beyond. Reglin B and **Pries AR**. **J Vasc Res** 2014; 51(5): 376-392.

Presentation, management, and outcomes of ischaemic heart disease in women. Vaccarino V, Badimon L, Corti R, de Wit C, Dorobantu M, Manfrini O, Koller A, **Pries A**, Cenko E, Bugiardini R. ***Nature Rev Cardiol*** 2013; 10(9): 508-518.

Angiogenesis: an adaptive dynamic biological patterning problem. Secomb TW, Alberding JP, Hsu R, Dewhirst MW, **Pries AR**. ***PLoS Comput Biol*** 2013; 9(3): e1002983.

Precapillary oxygenation contributes relevantly to gas exchange in the intact lung. Tabuchi A, Styp-Rekowska B, Slutsky AS, Wagner PD, **Pries AR***, Kuebler WM* (*these authors share senior authorship). ***Am J Respir Crit Care Med*** 2013; 188(4): 474-481.

Excessive erythrocytosis compromises the blood-endothelium interface in erythropoietin-overexpressing mice. Richter V, Savery MD, Gassmann M, Baum O, Damiano ER, **Pries AR**. ***J Physiol*** 2011; 589(21): 5181-5192.

Pulsatile shear and Gja5 modulate arterial identity and remodeling events during flow-driven arteriogenesis. Buschmann I*, **Pries A***, Styp-Rekowska B et al (*these authors contributed equally). ***Development*** 2010; 137(13): 2187-2196.

The shunt problem: control of functional shunting in normal and tumour vasculature. **Pries AR**, Hopfner M, Le Noble F, Dewhirst MW, Secomb TW. ***Nature Rev Cancer*** 2010; 10(8): 587-593.

Origins of heterogeneity in tissue perfusion and metabolism. **Pries AR** and Secomb TW. ***Cardiovasc Res*** 2009; 81(2): 328-335.

Blood flow in microvascular networks. **Pries AR** and Secomb TW. In: ***Handbook of Physiology***: Microcirculation, edited by Tuma RF, Durán WN and Ley K., Elsevier, 2008, Chap 1, 3-36.

Remodeling of blood vessels: responses of diameter and wall thickness to hemodynamic and metabolic stimuli. **Pries AR**, Reglin B, Secomb TW. ***Hypertension*** 2005; 46(4): 726-731.

The endothelial surface layer. **Pries AR**, Secomb TW, Gaehtgens P. ***Pflugers Arch*** 2000; 440(5): 653-666.

Design principles of vascular beds. **Pries AR**, Secomb TW, Gaehtgens P. ***Circ Res*** 1995; 77(5): 1017-1023.

Resistance to blood flow in microvessels in vivo. **Pries AR**, Secomb TW, Gessner T, Sperandio MB, Gross JF, Gaehtgens P. ***Circ Res*** 1994; 75(5): 904-915.