

## Curriculum vitae

<b>Name</b>	<b>Roland Seifert, MD, PhD</b>	
<b>Researcher ID</b>	G-3189-2013	
<b>Date and place of birth</b>	December 5, 1960, Berlin, Germany	
<b>Nationality</b>	German	
<b>Current position</b>	Tenured Full Professor and Director, Institute of Pharmacology, Centre of Pharmacology and Toxicology, Hannover Medical School (MHH)	
<b>Email</b>	seifert.roland@mh-hannover.de	
<b>Homepage</b>	<a href="https://www.mhh.de/pharmakologie">https://www.mhh.de/pharmakologie</a>	
<b>Graduate and post-graduate academic education</b>	1979-1985	Medical School, Free University of Berlin, Germany
	1983-1985	Fellow of the German National Merit Foundation
	1986	MD degree in Medicine (graduation with honors)
	1992	PhD degree in Pharmacology ("Habilitation") on "Histamine receptors in HL-60 leukemia cells".
<b>Postgraduate medical education</b>	1986-1995	Pharmacology and Toxicology, Free University of Berlin (Prof. Dr. Günter Schultz)
	1991	Accreditation as Specialist for Pharmacology and Toxicology by the Medical Board Berlin (Facharzt)
	since 2005	Authorization to conduct postgraduate education in Pharmacology and Toxicology for physicians
<b>Scientific career</b>	1986-1995	Postdoc with Prof. Dr. Günter Schultz, Institute of Pharmacology, Free University of Berlin
	1995-1998	Postdoc with Dr. Brian Kobilka (Nobel Laureate for Chemistry 2012), Howard Hughes Medical Institute, Stanford University, Palo Alto, CA, USA
	1998-2004	Associate Professor for Pharmacology and Toxicology at the University of Kansas (KU), Lawrence, KS, USA (tenure awarded in 2004)
	2004-2008	Full Professor and Chairman, Department of Pharmacology and Toxicology, University of Regensburg, Germany
	since 2008	Full Professor and Director, Institute of Pharmacology, Hannover Medical School (MHH), Germany
	since 2019	Head of the Research Core Unit Metabolomics, Hannover Medical School (MHH), Germany
<b>Research awards</b>	April 1999	"New Faculty Award", University of Kansas (\$ 5,000 for research on "G-protein coupling of the histamine H <sub>2</sub> -receptor")
	May 1999	"J. R. and Inez Jay Award" of the Higuchi Biosciences Center of the University of Kansas (\$ 30.000 for research on "Probes of G-protein conformational states")
	May 2002	"J. R. and Inez Jay Award" of the Higuchi Biosciences Center of the University of Kansas (\$ 30.000 for research on "Molecular and behavioral analysis of Lesch-Nyhan syndrome")
	January 2023	Poulssoen medal 2022 of the Norwegian Society of Pharmacology and Toxicology
	October 2023	PHOENIX Pharmacy Science award for the work on the sGC activator cinaciguat ( <a href="#">link to PubMed</a> )

<b>Teaching awards</b>	2002, 2005 2010, 2012, 2013, 2014, 2015, 2016, 2017, 2018 2019, 2020, 2021, 2022, 2023	Undergraduate Teaching Excellence Award, KU  Best Teacher Award from the medical students, MHH
<b>Research topics</b>	<ul style="list-style-type: none"> <li>• G-protein-coupled receptors (particularly histamine receptors)</li> <li>• Cyclic nucleotides (particularly non-canonical cNMPs)</li> <li>• Mass-spectrometric analysis of histamine metabolites and cyclic nucleotides</li> <li>• Pharmaceutical market, drug safety, and drug approval</li> <li>• Traditional medicines, botanicals, dietary supplements</li> <li>• Pharmacology and society</li> <li>• History of pharmacology</li> <li>• Scientometrics</li> </ul>	
<b>Publications (PubMed) (as per May 2024)</b>	<ul style="list-style-type: none"> <li>• 290 peer-reviewed original publications (first authorship: 29; co-authorship: 102; senior authorship: 159)</li> <li>• 53 peer-reviewed reviews (first authorship: 23; co-authorship: 7; senior authorship: 23)</li> <li>• 23 peer-reviewed editorials, letters, commentaries, correspondences (first authorship: 17; co-authorship: 1; senior authorship: 5)</li> <li>• 60 book articles, 11 congress contributions/reports, 138 postgraduate educational articles for scientists, 65 scientific book reviews</li> <li>• Textbook for medical students "Basiswissen Pharmakologie" (2018) ISBN 978-3-662-56302-1 (softcover), ISBN 978-3-662-56303-8 (eBook)</li> <li>• Textbook for medical students "Basic Knowledge of Pharmacology" (2019) ISBN 978-3-030-18898-6 (hardcover), ISBN 978-3-030-18899-3 (eBook)</li> <li>• Textbook for medical students "Basiswissen Pharmakologie", 2<sup>nd</sup> edition (2021) ISBN 978-3-662-60503-5 (softcover), ISBN: 978-3-662-60504-2; (eBook)</li> <li>• Book for the general public "Medikamente leicht erklärt" (2021) ISBN 978-3-662-62329-9 (softcover), ISBN 978-3-662-62330-5 (eBook)</li> <li>• Book for the general public "Drugs easily explained" (2022) ISBN 978-3-031-12187-6 (softcover) ISBN: 978-3-031-12188-3 (eBook)</li> </ul>	
<b>Bibliometric analysis (as per May 6, 2024)</b>	<ul style="list-style-type: none"> <li>• Cumulative impact factor: 1.732,282</li> <li>• Average impact factor: 5.668</li> </ul>	
<b>Citation metrics (as per March 6, 2024)</b>  <b>Source:</b> <a href="http://www.webofscience.com">www.webofscience.com</a>	Web of Science Core Collection metrics: <ul style="list-style-type: none"> <li>• Total documents: 358 (Web of Science), of which 349 are listed in the Web of Science Core Collection</li> <li>• Sum of times cited (Web of Science Core Collection): 11,159</li> <li>• h-index: 56 (Web of Science Core Collection)</li> </ul>	

<b>Editorial activities</b>	<p>2005</p> <p>2007-2014 2011-2014 since 2014</p> <p>2014-2015</p> <p>since 2016</p> <p>2017</p> <p>Since 2021</p>	<p>Book "G-Protein-Coupled Receptors" together with Prof. Wieland (Mannheim, Germany)</p> <p>Associate Editor of <i>J. Pharmacol. Exp. Ther.</i></p> <p>Associate Editor of <i>PLoS One</i></p> <p>Member of the Editorial Board of <i>J. Biol. Chem.</i></p> <p>Associate Editor of <i>Naunyn Schmiedeberg's Archives of Pharmacology</i></p> <p>Editor-in-chief of <i>Naunyn Schmiedeberg's Archives of Pharmacology</i></p> <p><i>Handbook of Experimental Pharmacology</i></p> <p>"Non-canonical cyclic nucleotides" (volume 238) and "Histamine in health and disease" (volume 241), the latter volume together with Prof. Hattori (Toyama, Japan)</p> <p>Editor of the "Arzneiverordnungs-Report" (German prescription drug report) together with Wolf-Dieter Ludwig and Bernd Mühlbauer</p>
<b>Reviewing activities</b>	<ul style="list-style-type: none"> <li>Reviewer for research funding organisations including the German Research Foundation (DFG, Germany), Wellcome Trust (GB), American Heart Association (USA), National Institutes of Health (USA), National Science Foundation (USA), Centre National de la Recherche Scientifique (France), Telethon Foundation (Italy), German-Israel Foundation</li> <li>Reviewer for leading scientific journals including <i>Nature</i>, <i>Science</i>, <i>Mol. Pharmacol.</i>, <i>Trends Pharmacol. Sci.</i>, <i>J. Neurochem.</i>, <i>J. Biol. Chem.</i>, <i>Mol. Pharmacol.</i>, <i>Proc. Natl. Acad. Sci. USA</i>, <i>Biochem. Pharmacol.</i> (Advisory Editorial Board 2004-2007), <i>NS Arch. Pharmacol.</i> (Advisory Editorial Board 2004-2007).</li> </ul>	
<b>Mentoring activities</b>	<p>2007-2010</p> <p>since 2022</p>	<p>Liaison officer to the Max-Weber program within the German Merit Foundation</p> <p>Liaison officer to the German Academic Scholarship Foundation</p>
<b>Activities within the German Society for Pharmacology and Toxicology (DGPT)</b>	<p>2008-2020</p> <p>since 2011</p> <p>since 2012</p> <p>2021-2023</p> <p>since 2024</p>	<p>Chair of the Postgraduate Education Committee of the German Society for Pharmacology and Toxicology</p> <p>DGPT representative participating in the update of the guideline for the treatment of anaphylaxia</p> <p>Member of the Executive Board of the German Society for Pharmacology (DGP)</p> <p>Vice President of the German Society for Pharmacology (DGP)</p> <p>President of the German Society for Pharmacology (DGP)</p>
<b>Academic self-administration</b>	<p>2002-2004</p> <p>2005-2007</p> <p>2011-2019</p> <p>2011-2017</p> <p>since 2018</p>	<p>Radiation safety officer of the University of Kansas</p> <p>Chief executive officer of the Institute of Pharmacy of the University of Regensburg</p> <ul style="list-style-type: none"> <li>Member of the academic section IV of the MHH</li> <li>Chairman of the Doctoral Candidate Admissions Board for Theoretical Medicine at the MHH</li> </ul> <p>Coordinator for the development of exam questions in the field of pharmacology at the Federal Institute for Medical and Pharmaceutical Exam Questions (IMPP) in Mainz</p>
<b>Postgraduate teaching</b>	<p>since 2011</p>	<p>Lectures for the German Society of Pharmacy</p>

<b>Congress organization</b>	2010-2016 2014 2025	Biannual cCMP meetings (Hannover Germany) Congress chairman of the 80 <sup>th</sup> annual meeting of the German Society for Pharmacology and Toxicology (DGPT), Hannover, April 1-3, 2014 Congress chairman of the 10 <sup>th</sup> German Pharm-Tox Summit/ 91 <sup>st</sup> annual meeting of the German Society for Pharmacology and Toxicology (DGPT), Hannover
<b>Public relations activities</b>	since 2011 since 2011	TV and radio interviews on pharmacology-related topics Writer of scientific paper reviews, journal club contributions and book reviews for <i>Biospektrum</i>
<b>Academic life</b>	since 2013 since 2017 since 2021	Senator for cultural affairs of the MHH First oboist of the German Philharmonic Orchestra of Physicians (Bundesärztesphilharmonie) President of the German Philharmonic Orchestra of Physicians (Bundesärztesphilharmonie)

### The 10 most important publications

1. **Seifert, R.**, Hoshino, J., Kröger, H.: Nicotinamide methylation. Tissue distribution, developmental and neoplastic changes. *Biochim. Biophys. Acta* **801**, 259-264 (1984): First peer-reviewed paper of my career.
2. **Seifert, R.**, Höer, A., Schwaner, I., Buschauer, A.: Histamine increases cytosolic Ca<sup>2+</sup> in HL-60 promyelocytes *via* H<sub>2</sub>-receptors with an unique agonist/antagonist profile and induces functional differentiation. *Mol. Pharmacol.* **42**, 235-241 (1992): Important basis for PhD degree ("Habilitation").
3. **Seifert, R.**, Wenzel-Seifert, K., Lee, T. W., Gether, U., Sanders-Bush, E., Kobilka, B. K.: Different effects of G<sub>s</sub>α splice variants on β<sub>2</sub>-adrenoreceptor-mediated signaling: The β<sub>2</sub>-adrenoreceptor coupled to the long splice variant of G<sub>s</sub>α has properties of a constitutively active receptor. *J. Biol. Chem.* **273**, 5109-5116 (1998): Most important paper of my post-doc time at Stanford University.
4. Gille, A., Lushington, G. H., Mou, T.-C., Doughty, M. B., Johnson, R. A., **Seifert, R.**: Differential inhibition of adenylyl cyclase isoforms and soluble guanylyl cyclase by purine and pyrimidine nucleotides. *J. Biol. Chem.* **279**, 19955-19969 (2004): New pharmacological concept for the inhibition of signal-transducing enzymes.
5. **Seifert, R.**: cCMP and cUMP: emerging second messengers. *Trends Biochem. Sci.* **40**: 8-15 (2015): Postulate of new second messenger molecules.
6. Dessauer CW, Watts VJ2, Ostrom RS, Conti M, Dove S, **Seifert R.** International Union of Basic and Clinical Pharmacology. CI. Structures and Small Molecule Modulators of Mammalian Adenylyl Cyclases. *Pharmacol Rev*, **69**, 93-139 (2017): Summary of a major part of my research from the past 15 years.
7. **Seifert R.** Rethinking Pharmacological Nomenclature. *Trends Pharmacol Sci*, **39**, 785-797 (2018): New concept for the rational designation of drug classes.
8. **Seifert R.** Basic Knowledge of Pharmacology, Springer, Cham (2019): Modern and concise pharmacology textbook using modern nomenclature.
9. **Seifert R.** Basiswissen Pharmakologie, 2. Auflage, Springer, Heidelberg (2021): Modern and concise textbook in German language using modern nomenclature.
10. **Seifert R.** Medikamente leicht erklärt, Springer, Heidelberg (2021): Book on drugs for the general public. Also available as English version (Drugs easily explained, Springer, Cham (2022))