Curriculum Vitae

Prof. Dr. rer. nat. Stephan A. Sieber

Date of Birth: March 19, 1976 in Marburg, Germany

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Current Position

Since 2009: Full professor for organic chemistry (OCII) at Technical University Munich (TUM), Germany

Since 2019: Associated member of the Helmholtz Centre for Infectious Research in Saarbrücken, Germany

Previous Professional Experience

2006 – 2009: Independent research position at the Ludwig-Maximilian University of Munich (LMU) funded by the Emmy Noether program. Mentor: Prof. Thomas Carell

2004 – 2006: Postdoctoral research with Prof. Benjamin F. Cravatt at the Scripps Research Institute in La Lolla, USA

Education

10/2002 – 03/2004: Research for doctoral thesis with Prof. Mohamed A. Marahiel at Philipps-University in Marburg, Germany. “Nonribosomal Peptide Synthetases: Quaternary Structure and Chemoenzymatic Synthesis of Macrocyclic Peptides”.

12/2001 – 12/2002: Research for doctoral thesis in the laboratory of Prof. Christopher T. Walsh at Harvard Medical School in Boston, USA

09/1999 – 03/2000: Exchange student at the University of Birmingham, UK

10/1996 – 08/2001: Graduate student of chemistry, Philipps-University Marburg, Germany. Diploma thesis under the guidance of Prof. Mohamed A. Marahiel “Investigation of the quaternary structure of nonribosomal peptide synthetases”.

Awards

2020:	Merck Future Insight Prize for antibacterial research
2020:	Klaus-Grohe-Prize of the GDCh for medicinal chemistry
2019:	M^4 award of the Bavarian Ministry of Economics for aBacter (start-up)
2018:	VIPplus funding for the aBacter start-up project
2016:	Heinz Maier-Leibnitz-Medal of the TUM
2016:	ERC Consolidator grant
2016:	Klung-Wilhelmy-Research prize for chemistry
2016:	Elected member of The Bavarian Academy of Arts and Sciences
2016:	Novartis Chemistry Lectureship
2013:	Go-Bio start up funding for the AVIRU spin-off
2010:	ERC Starting Grant
2010:	EXIST start up funding for the AVIRU spin-off project by the BMWi
2009:	Arnold Sommerfeld-Prize, The Bavarian Academy of Arts and Sciences
2008:	Innovation Award of the German BioRegions
2008:	Thieme Journal Award
2006:	Römer Award by the LMU
2006:	DFG Emmy Noether phase II for independent research
2004:	Friedrich-Weygand award of the Max-Bergmann Kreis
2004:	DFG Emmy Noether fellowship phase I for postdoctoral research
2002:	Ph.D. scholarship by the Studienstiftung des deutschen Volkes
1999:	Fellow of the Studienstiftung des deutschen Volkes

Activities

Since 2020:	Advisory Board of the TUM Institute of Advances Studies
Since 2020:	Academic Director of the TUM Molecular Assembly Venture Lab
Since 2017:	Editorial Board Member of Biochemistry
Since 2016:	Editorial Board Member of Cell Chemical Biology
Since 2016:	Editorial Board Member of ChemBioChem

Additional Information

Since 2018:	Dean, Faculty of Chemistry, TUM

10 most important publications (Independent research):

Le, P., Kunold, E., Macsics, R., Rox, K., Jennings, M., Ugur, I., Reinecke, M., Chaves-Moreno, D., Hackl, M.W., Fetzer, C., Mandl, F.A.M., Lehmann, J., Korotkov, V.S., Hacker, S.M., Küster, B., Antes, I., Pieper, D., Rohde, M., Wuest, W.M., Medina, E., **Sieber, S.A.**, " Repurposing human kinase inhibitors to create an antibiotic active against drug-resistant Staphylococcus aureus, persisters and biofilms", ***Nat. Chem.***, 2020, 12, 145-158

Kielkowski, P., Buchsbaum, I.Y., Kirsch, V.C., Bach, N.C., Drukker, M, Cappello, S.*, **Sieber, S.A***, "FICD activity and AMPylation remodelling modulate human neurogenesis", ***Nat. Commun.***, 2019, doi.org/10.1038/s41467-019-14235-6

Kirsch, V.K.°, Orgler, C.°, Braig, S., Irmela, J., Auerbach, D., Müller, R., Vollmar, A.M.*, **Sieber, S.A.***, "The cytotoxic natural product vioprolide A targets nucleolar protein 14 essential for ribosome biogenesis", ***Angew. Chem. Int. Edit.***, 2020, 59, 1595-1600.

Gatsogiannis, C.°, Balogh, D.°, Merino, F., **Sieber, S.A.***, Raunser, S.*, "Cryo-EM structure of the ClpXP protein degradation machinery", ***Nat. Struct. Mol. Biol.***, 2019, 26, 946-954

Zhao, W., Cross, A.R., Crow-McAuliffe, C., Weigert-Munoz, A., Csatary, E.E., Solinski, A.E., Krysiak, J., Goldberg, J.B., Wilson, D.N., Medina, E., Wuest, W.M., **Sieber, S.A.**, "The natural product elegaphenone potentiates antibiotic effects against *Pseudomonas aeruginosa*", ***Angew. Chem. Int. Edit.***, 2019, 58, 8581-8584

Hoegl, A., Nodwell, M.B., Kirsch, V.C., Bach, N.C., Pfanzelt, M., Stahl, M., Schneider, S., and **Sieber, S.A.** "Mining the cellular inventory of pyridoxal phosphate-dependent enzymes with functionalized cofactor mimics." ***Nat. Chem.*** 2018, 10, 1234-1245.

Stahl M., Korotkov V., Balogh D., Kick L., Gersch M., Pahl A., Kielkowski P., Richter K., Schneider S.* and **Sieber S.A.*** "Selective activation of human caseinolytic protease P (ClpP)." ***Angew. Chem. Int. Ed.***, 2018, 57, 14602-14607.

Wright, M.H., Fetzer, C., **Sieber, S.A.**, "Chemical probes unravel an antimicrobial defense response triggered by binding of the human opioid dynorphin to a bacterial sensor kinase", ***J. Am. Chem. Soc.***, 2017, 139, 6152-6159.

Fetzer, C., Korotkov, V.S., Thänert, R., Lee, K.M., Neuenschwander, M., von Kries, J.P., Medina, E., **Sieber, S.A.**, "A Chemical Disruptor of the ClpX Chaperone Complex Attenuates the Virulence of Multidrug-Resistant Staphylococcus aureus", ***Angew. Chem. Int. Ed.***, 2017, 56, 15746-15750.

Gersch, M., Famulla, K., Dahmen M., Göbl, C., Malik, I., Richter, K., Korotkov, V. S., Sass, P., Rübsamen-Schaeff, H., Madl, T., Brötz-Oesterhelt*, H., **Sieber, S.A.***, "AAA+ chaperones and acyldepsipeptides activate the ClpP protease via conformational control", ***Nat. Comm.***, 2015, 6, 6320, doi:10.1038/ncomms7320.

Google Scholar: https://scholar.google.de/citations?user=oA47mcEAAAAJ&hl=de

Stephan A. Sieber, March 21st 2021