

Philipp Schwenk | CV

2021: PhD in Biology

University of Freiburg: Institute of Biology II

Title: *Identification and Characterisation of NOT9B, a Novel Phytochrome A Signalling Component in Arabidopsis thaliana*

Supervisor: Prof. Dr. Andreas Hiltbrunner

Framework: Spemann Graduate School of Biology and Medicine (SGBM)

Grade: 1.0, *summa cum laude*

Education

Kreisgymnasium Hochschwarzwald

Abitur, Grade: 1.2

79822 Titisee-Neustadt

2000-2009

Albert-Ludwigs Universität Freiburg

Bachelor of Science, Biology, Grade: 1.6

79104 Freiburg im Breisgau

2009-2012

Albert-Ludwigs Universität Freiburg

Master of Science, Biology, Grade: 1.0

79104 Freiburg im Breisgau

2012-2015

Albert-Ludwigs Universität Freiburg

PhD, Biology, Grade: 1.0, summa cum laude

79104 Freiburg im Breisgau

2015-2021

Honors, Grants & Awards

iGEM Competition 2013, Team Freiburg: First runner-up Europe, Best BioBrick Engineered, Best Foundational Advance

Alumni Award for Best Master's Degree: Faculty of Biology, Albert-Ludwigs University, Freiburg im Breisgau, 2015

SGBM Track 2 Fellowship: Spemann Graduate School of Biology and Medicine Track 2 Fellow, Freiburg im Breisgau, since 2015

FRIAS Junior Researcher Conference Grant: 2019, 10.000 €

New Phytologist Next Generation Scientist Conference Travel Grant: Tartu, Estonia, 2022

Non-curricular Activities

PhD-Convent speaker & Co-founder, Faculty of Biology: 2016, 2017

Supervision of Freiburg iGEM Team 2015: Development of a label-free, multiplexed diagnostic tool based on the iRIF technology

Supervision of Freiburg iGEM Team 2017: Improvement of the safety of CAR T-cell technology

YRSPP2018: Co-organizer of the Young Researchers Symposium on Plant Photobiology, 2018 (Cologne, Germany)

YRSPP2022: Co-organizer of the Young Researchers Symposium on Plant Photobiology, 2022 (Freiburg, Germany)

PostDoc Initiative 2022: Co-Initiator of the Mittelbau-Initiative (Movement in Freiburg to advance working conditions for ECRs)

CIBSS School Ambassador Programme 2022: Mentoring of pupils

Selected Talks

Plant Science Student Conference (PSSC) 2017 - Halle an der Saale, Germany: NOT9 - An Old Dog Learned a New Trick

International Symposium on Plant Photobiology (ISPP) 2021 - Cold Spring Harbor, USA: PhyA - Mediated Processing Body Disassembly in Far-Red Light

DORKS - webinar series Rice University, Houston, Texas, 2022: Do plants see light? And should we care about this?

Publications

Philipp Schwenk and Andreas Hiltbrunner. Phytochrome A Mediates the Disassembly of Processing Bodies in Far-Red Light. *Frontiers in Plant Science*, 13:828529, February 2022.

Philipp Schwenk, David J Sheerin, Jathish Ponnu, Anne-Marie Staudt, Klara L Lesch, Elisabeth Lichtenberg, Katalin F Medzihradzky, Ute Hoecker, Eva Klement, András Viczián, and Andreas Hiltbrunner. Uncovering a novel function of the CCR4-NOT complex in phytochrome A-mediated light signalling in plants. *eLife*, 10, March 2021.

Nikolai Kahle, David J. Sheerin, Patrick Fischbach, Leonie-Alexa Koch, **Philipp Schwenk**, Dorothee Lambert, Ryan Rodriguez, Konstantin Kerner, Ute Hoecker, Matias D. Zurbruggen, and Andreas Hiltbrunner. COLD REGULATED 27 and 28 are targets of CONSTITUTIVELY PHOTOMORPHOGENIC 1 and negatively affect phytochrome B signalling. *The Plant Journal*, 104:1038–1053, November 2020.

Julian Bender, Sabine Bognar, Maurizio Camagna, Julia A. M. Donauer, Julian W. Eble, Ramona Emig, Sabrina Fischer, Rabea Jesser, Luisa Keilholz, Daniel M. U. Kokotek, Julika Neumann, Simon Nicklaus, Ricardo R. Q. P. T. Oude Weernink, Lara G. Stühn, Nathalie Wössner, Stefan D. Krämer, **Philipp Schwenk**, Nicole Gensch, Günter Roth, and Maximilian H. Ulbrich. Multiplexed antibody detection from blood sera by immobilization of in vitro expressed antigens and label-free readout via imaging reflectometric interferometry (iRIf). *Biosensors & Bioelectronics*, 115:97–103, September 2018.

Beatrix Enderle, David J. Sheerin, Inyup Paik, Praveen Kumar Kathare, **Philipp Schwenk**, Cornelia Klose, Maximilian H. Ulbrich, Enamul Huq, and Andreas Hiltbrunner. PCH1 and PCHL promote photomorphogenesis in plants by controlling phytochrome B dark reversion. *Nat. Commun.*, 8, December 2017.

Veronika Angerer, **Philipp Schwenk**, Thomas Wallner, Volkhard Kaefer, Andreas Hiltbrunner, and Annegret Wilde. The protein Slr1143 is an active diguanylate cyclase in *Synechocystis* sp. PCC 6803 and interacts with the photoreceptor Cph2. *Microbiology*, 163, June 2017.

Michael Agne, Ilona Blank, Alicia J. Emhardt, Christoph G. Gabelein, Fenja Gawlas, Nadine Gillich, Patrick Gonschorek, Thomas J. Juretschke, Stefan D. Kramer, Natalie Louis, Anne Muller, Alina Rudolf, Lisa M. Schafer, Manuel C. Scheidmann, Lisa J. Schmunk, **Philipp Schwenk**, Maximilian R. Stammnitz, Philipp M. Warmer, Wilfried Weber, Adrian Fischer, Beate Kaufmann, Hannah J. Wagner, and Gerald Radziwill. Modularized crispr/dcas9 effector toolkit for target-specific gene regulation. *ACS Synth Biol*, 3(12):986–9, 2014.