

CURRICULUM VITAE

CONTACT INFORMATION

PD Dr. rer. nat. Astrid S. Pfister

Dipl.-Biol., AkadR a.Z.

Independent group leader

Institute for Biochemistry and Molecular Biology (IBMB)

Ulm University

Albert-Einstein Allee 11, Germany

M24, room 324

phone: 0049 - 731 - 50033715

E-Mail: astrid.pfister@uni-ulm.de



Homepage:

<https://www.uni-ulm.de/med/med-biomolbio/research-groups/pfister/>

UNIVERSITY EDUCATION

09/2016 – today	<p>Independent Group Leader Institute for Biochemistry and Molecular Biology (IBMB) Medical Faculty of Ulm University, Germany</p> <p><i>July, 2024: Habilitation (Venia legendi) in Biochemistry and Molecular Biology, Medical Faculty Ulm</i></p> <p><i>Parental leave: total of 20 months between 2021 and 2024</i></p>
10/2012 – 08/2016	<p>Post-doctoral fellow Institute for Biochemistry and Molecular Biology (IBMB) Medical Faculty of Ulm University, Germany laboratory of Prof. Dr. Michael Kühl</p>
11/2007 – 09/2012	<p>PhD (Dr. rer. nat.) Institute for Experimental Medicine II Friedrich-Alexander-University, Erlangen-Nuremberg, Germany laboratory of Prof. Dr. Jürgen Behrens</p>
10/2002 – 10/2007	<p>Studies of Biology University Diploma. Friedrich-Alexander-University, Erlangen-Nuremberg, Germany</p>

TEACHING

Supervision of bachelor, master and PhD students in molecular medicine and biology
Supervision of medical doctor students
Teaching, „Physikum“ examinations, lab seminars

- Total scope of about 4 semester hours per week (**4 SWS**)
- Laboratory internships and seminar series for students in Human Medicine, Dentistry and Molecular Medicine (Subject: Biochemistry): Total duration of more than **704 hours**
- Examination work: Total duration of more than **178 hours**

ADDITIONAL QUALIFICATIONS

Workshop – Training to apply for Funding

Workshop – Leadership

Workshop – Females in Academia

Didactics workshop I and II

Safety Level Certificate

Certificate to work with aquatic animals, such as fish and frog

Certificate to work with mice

Member of the Junior Faculty of the IGradU, University of Ulm, Germany.

REVIEWER

Since 2016: For scientific funding agencies and scientific journals

FUNDING

Deutsche Krebshilfe (01/2017 – 07/2020)

Bausteinförderung 3.2V, Ulm University (7/2016 - 6/2017)

Bausteinförderung 3.2, Ulm University (7/2014 - 6/2016)

PUBLICATION LIST

- H-Index: 16 (Researchgate 04/2026)
- Impact factor > 38, as first and last author
- 17 original publications (3x first author & 4x last author)
- 4 Reviews (3x corresponding author)

Publications as a group leader:

21. **Pfister, A. S. (2023)**. An Update on Nucleolar Stress: The Transcriptional Control of Autophagy. *Cells*. 12(16):2071. doi: 10.3390/cells12162071.
20. Werle SD, Ikonomi N, Schwab JD, Kraus JM, Weidner FM, Rudolph KL, **Pfister AS**, Schuler R, Kühl M, Kestler HA **(2022)**. Identification of dynamic driver sets controlling phenotypical landscapes. *Comput Struct Biotechnol J*. 20:1603-1617. doi: 10.1016/j.csbj.2022.03.034.
19. Dannheisig, D. P., Schimansky A., Donow, C., & **Pfister, A. S. (2021)**. Nucleolar Stress Functions Upstream to Stimulate Expression of Autophagy Regulators. *Cancers*. 13,6220. <https://doi.org/10.3390/cancers13246220>
18. Klionsky D.J.,.....**Pfister A.S.**.....and Tong, C. K. **(2021)** Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition). *Autophagy*. 10.1080/15548627.2020.1797280
17. Dannheisig, D. P., Bächle, J., Tasic, J., Keil, M., & **Pfister, A. S. (2021)**. The Wnt/ β -Catenin Pathway is Activated as a Novel Nucleolar Stress Response. *Journal of Molecular Biology*. <https://doi.org/10.1016/j.jmb.2020.11.018>
16. **Pfister, A. S. (2019)**. Emerging role of the nucleolar stress response in autophagy. *Frontiers in Cellular Neuroscience*. <https://doi.org/10.3389/fncel.2019.00156>
15. Keil, M., Meyer, M. T., Dannheisig, D. P., Maerz, L. D., Philipp, M., & **Pfister, A. S. (2019)**. Loss of Peter Pan protein is associated with cell cycle defects and apoptotic events. *Biochimica et Biophysica Acta - Molecular Cell Research*. <https://doi.org/10.1016/j.bbamcr.2019.01.010>
14. Dannheisig, D. P., Beck, E., Calzia, E., Walther, P., Behrends, C., & **Pfister, A. S. (2019)**. Loss of Peter Pan (PPAN) Affects Mitochondrial Homeostasis and Autophagic Flux. *Cells*. <https://doi.org/10.3390/cells8080894>
13. Groß, A., Kracher, B., Kraus, J. M., Kühlwein, S. D., **Pfister, A. S.**, Wiese, S., ... Kestler, H. A. **(2019)**. Representing dynamic biological networks with multi-scale probabilistic models. *Communications Biology*. <https://doi.org/10.1038/s42003-018-0268-3>
12. Guo, Y., Dorn, T., Kühl, S. J., Linnemann, A., Rothe, M., **Pfister, A. S.**, ... Kühl, M. **(2019)**. The Wnt inhibitor Dkk1 is required for maintaining the normal cardiac differentiation program in *Xenopus laevis*. *Developmental Biology*. <https://doi.org/10.1016/j.ydbio.2019.02.009>
11. **Pfister, A. S.**, & Kühl, M. **(2018)**. Of Wnts and Ribosomes. *Progress in Molecular Biology and Translational Science*. <https://doi.org/10.1016/bs.pmbts.2017.11.006>

10. Siegle, L., Schwab, J. D., Kühlwein, S. D., Lausser, L., Tümpel, S., **Pfister, A. S.**, ... Kestler, H. A. (2018). A Boolean network of the crosstalk between IGF and Wnt signaling in aging satellite cells. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0195126>

Publications as a Post-Doc:

9. Seigfried, F. A., Cizelsky, W., **Pfister, A. S.**, Dietmann, P., Walther, P., Kühl, M., & Kühl, S. J. (2017). Frizzled 3 acts upstream of Alcam during embryonic eye development. *Developmental Biology*. <https://doi.org/10.1016/j.ydbio.2017.04.004>
8. **Pfister, A. S.**, Keil, M., & Kühl, M. (2015). The Wnt target protein Peter Pan defines a novel p53-independent nucleolar stress-response pathway. *Journal of Biological Chemistry*. <https://doi.org/10.1074/jbc.M114.634246>
- Pfister, A. S.**, Keil, M., & Kühl, M. (2022). **Correction:** The Wnt target protein Peter Pan defines a novel p53-independent nucleolar stress-response pathway. *Journal of Biological Chemistry*, 299, 1.
7. Guo, Y., Kühl, S. J., **Pfister, A. S.**, Cizelsky, W., Denk, S., Beer-Molz, L., & Kühl, M. (2014). Comparative analysis reveals distinct and overlapping functions of Mef2c and Mef2d during cardiogenesis in *Xenopus laevis*. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0087294>
6. Özhan, G., Sezgin, E., Wehner, D., **Pfister, A. S.**, Kühl, S. J., Kagermeier-Schenk, B., ... Weidinger, G. (2013). Lypd6 enhances wnt/ β -catenin signaling by promoting Irf6 phosphorylation in raft plasma Membrane Domains. *Developmental Cell*. <https://doi.org/10.1016/j.devcel.2013.07.020>

Publications during the PhD phase:

5. **Pfister, A. S.**, Tanneberger, K., Schambony, A., & Behrens, J. (2012). Amer2 protein is a novel negative regulator of Wnt/ β -catenin signaling involved in neuroectodermal patterning. *Journal of Biological Chemistry*. <https://doi.org/10.1074/jbc.M111.308650>
4. **Pfister, A. S.**, Hadjihannas, M. V., Röhrig, W., Schambony, A., & Behrens, J. (2012). Amer2 protein interacts with EB1 protein and adenomatous polyposis coli (APC) and controls microtubule stability and cell migration. *Journal of Biological Chemistry*. <https://doi.org/10.1074/jbc.M112.385393>
3. Tanneberger, K., **Pfister, A. S.**, Kriz, V., Bryja, V., Schambony, A., & Behrens, J. (2011). Structural and functional characterization of the Wnt inhibitor APC membrane recruitment 1 (Amer1). *Journal of Biological Chemistry*. <https://doi.org/10.1074/jbc.M111.224881>
2. Tanneberger, K., **Pfister, A. S.**, Brauburger, K., Schneikert, J., Hadjihannas, M. V., Kriz, V., ... Behrens, J. (2011). Amer1/WTX couples Wnt-induced formation of PtdIns(4,5)P2 to LRP6 phosphorylation. *EMBO Journal*. <https://doi.org/10.1038/emboj.2011.28>

Publications as a Diploma student:

1. Grohmann, A., Tanneberger, K., **Alzner, A.**, Schneikert, J., & Behrens, J. (2007). AMER1 regulates the distribution of the tumor suppressor APC between microtubules and the plasma membrane. *Journal of Cell Science*. <https://doi.org/10.1242/jcs.011320>