

Sebastian Arnold, Prof. Dr. med.

09.08.1974, german

Institution: Institute of Experimental and Clinical Pharmacology, Medical Faculty

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Position: Acting head Department II

Academic education including academic degrees

1994 – 2001 Studies in Human Medicine, University of Freiburg

Scientific graduation

2002 Promotion: Dr. med. University of Freiburg

Employment

since 2022	Acting Division Head, Division 2, Institute of Pharmacology
since 2016	Group leader, and Heisenberg-Professor (2017-2024), Institute of Pharmacology, University of Freiburg
2010-2016	Emmy Noether Group Leader, University Medical Centre, Renal Department, Freiburg
2009-2010	Clinical Resident and Junior Group Leader, University Medical Centre, Renal Department, Prof. G. Walz, Freiburg
2004-2008	Postdoctoral Fellow, laboratory of Prof. E. J. Robertson, Cell and Developmental Biology, University of Oxford, UK
2002-2004	Clinical Resident, University Medical Centre, Renal Department, Prof. G. Walz, Freiburg

Other activities, awards and honours

2021-2024	PI SFB 1453 (NephGen)
since 2019	Associated Investigator, Cluster of Excellence CIBSS
2019-2023	PI SFB 992 (MEDEP, Medical Epigenetics)
2015-2024	Executive Board member, Spemann Graduate School of Biology and Medicine (SGBM), Freiburg
2015-2018	PI SFB 1140, Freiburg
2014-2024	Executive Board member SFB 850, Freiburg
2012	Paul Schölmerich Award for Cardiology Research
since 2011	Executive Board member of the Center for Experimental Models and Transgenic Services (CEMT), Freiburg
since 2011	Member Spemann Graduate School of Biology and Medicine (SGBM), Freiburg
since 2011	Member Cluster of Excellence BIOS, Freiburg
2010-2022	PI SFB 850, Freiburg
2007-2008	Member Selection Committee, DAAD, London office
2004-2008	Feodor-Lynen Fellowship, Alexander von Humboldt Foundation

10 important publications

1. Bhuiyan T, Arecco N, Mendoza Sanchez PK, Kim J, Schwan C, Weyrauch S, Nizamuddin S, Prunotto A, Tekman M, Biniossek ML, Knapp B, Koidl S, Drepper F, Huesgen PF, Grosse R, Hugel T, **Arnold SJ**. TAF2 condensation in nuclear speckles links basal transcription factor TFIID to RNA splicing factors. **Cell Rep**, 44:115616. doi: 10.1016/j.celrep.2025.115616. (2025)
2. Schröder CM, Zissel L, Mersiowsky S-L, Tekman M, Probst S, Schüle KM, Preissl S, Schilling O, Timmers HTM, and **Arnold SJ**. EOMES establishes mesoderm and endoderm differentiation potential through SWI/SNF-mediated global enhancer remodeling. **Dev Cell** 60, 735-748 (2025).
3. Schüle KM, Weckerle J, Probst S, Wehmeyer AE, Zissel L, Schröder CM, Tekman M, Kim G-J, Schlägl I-M, Sagar, and **Arnold SJ**. Eomes restricts Brachyury functions at the onset of mammalian gastrulation. **Dev Cell** 58, 1627-1642 (2023).
4. Wehmeyer A., Schüle KM, Conrad A, Schröder CM, Probst S, and **Arnold SJ**. Chimeric 3D gastruloids – a versatile tool for studies of mammalian peri-gastrulation development. **Development** 149, dev200812. 10.1242/dev.200812 (2022).
5. Probst S, Sagar, Tasic J, Schwan C, Grün D, and **Arnold SJ**. Spatiotemporal sequence of early mesoderm and endoderm lineage segregation during mouse gastrulation. **Development** 148 (2021).
6. Tasic J, Kim G-J, Pavlovic M, Schröder CM, Mersiowsky S-L, Barg M, Hoffherr A, Probst S, Köttgen M, Hein L, and **Arnold SJ**. Eomes and Brachyury control pluripotency exit and germ layer segregation through changes of chromatin state. **Nat Cell Biol** 21, 1518-1531 (2019).
7. Kaminski MM, Tasic J, Kresbach C, Engel H, Klockenbusch J, Müller AL, Pichler R, Grahmmer F, Kretz O, Huber TB, Walz G, **Arnold SJ**^{*}, and Lienkamp SS^{*}. Direct Reprogramming of Fibroblasts into Renal Tubular Epithelial Cells by Defined Transcription Factors. **Nat Cell Biol** 18, 1269-1280 (2016). ^{*}co-corresponding authors
8. Costello I, Pimeisl IM, Dräger S, Bikoff EK, Robertson EJ, and **Arnold SJ**. The T-box transcription factor Eomesodermin acts upstream of Mesp1 to specify cardiac mesoderm during mouse gastrulation. **Nat Cell Biol** 13, 1084-1091 (2011).
9. **Arnold SJ**, and Robertson EJ. Making a commitment: cell lineage allocation and axis patterning in the early mouse embryo. **Nat Rev Mol Cell Biol** 10, 91-103 (2009).
10. **Arnold SJ**, Huang GJ, Cheung AFP, Era T, Nishikawa S, Bikoff EK, Molnar Z, Robertson EJ, and Groszer M. The T-box transcription factor Eomes/Tbr2 regulates neurogenesis in the cortical subventricular zone. **Genes Dev** 22, 2479-2484 (2008)