PD Dr. Susanne J. Kühl CV

Personal data

Name	Susanne J. Kühl neé Gessert
Nationality	German
Office Address	Institute of Biochemistry and Molecular Biology Albert-Einstein-Allee 11 89081 Ulm
Contact	susanne.kuehl@uni-ulm.de
Present position	Group leader at the Institute of Biochemistry and Molecular Biology, Ulm University
Homepage	http://www.uni-ulm.de/med/med-biomolbio.html

University education

1999-2004	Ulm University, Studies of Biology
2004-2007	Ulm University, PhD thesis
since 2007	Ulm University, Postdoc
since 2013	Ulm University, group leader

Additional qualifications

2007	*Sicherheit in der Gentechnologie, Projektleiterbefugnis nach §15 GenTG*
2011	*Fachkunde im Strahlenschutz*
2012-2015	*Didaktische Weiterbildung für das Baden-Württemberg Zertifikat für Hochschuldidaktik; Module I-III abgeschlossen*
2015-2018	Master of Medical Education (MME), Heidelberg
2019	*Abschluss Habilitationsverfahren (Venia Legendi) im Fach Biochemie und Molekulare Biologie an der Medizinischen Fakultät Ulm*

Funding

2008-2011	*Bausteinprogramm der Medizinische Fakultät Ulm*, funding for a PhD position (3 years)
2016-2018	*Stipendium der Medizinischen Fakultät Ulm für das MME Studium*
2016-2018	*Lehrprojekt-Förderung Sonderlinie Medizin der Medizinischen Fakultät Ulm* *Projekttitel: "Kompetenzorientiert Lehren und Lernen zur Motivationssteigerung in der Biochemie - Online-Nutzung mit der* Inverted Classroom *Methode*"

Auszeichnungen

2018	*Universitätslehrpreis 2018 der Universität Ulm*
2019	*Preis für die beste Lehre in der Vorklinik der Fachschaft Medizin Ulm*
2019	*Lehrforschungspreis der AG Lehrforschung der Medizinischen Fakultät Ulm*
2020	*Auszeichnung der Fachschaft Medizin Ulm zur gelungensten Online Lehre im SS2020 (Int. Seminar Modul 6: Vom Gen zum Protein, Sem. 2)*
2020	*Sonderpreis für engagierte Lehre im SoSe 2020 des Zentrums für Lehrentwicklung (ZLE)*

Organization/Management

since 2010	Safety officer at the Institute for Biochemistry and Molecular Biology
2012-2015	Deputy radioactive safety officer at the Institute for Biochemistry and Molecular Biology
since 2015	Member of the Junior Faculty of the International Graduate School in Molecular Medicine Ulm
since 2015	Teaching organizer of the Institute for Biochemistry and Molecular Biology
since 2015	Member of the eLearning task force, Medical Faculty of Ulm University
since 2015	Member of the task force “TTU – To train you”, Medical Faculty of Ulm University
since 2015	Member of the GMA („Gesellschaft für Medizinische Ausbildung“)
since 2015	member of the GMA committee „Digitalisierung“
2017-2019	*Sachverständige des Instituts für medizinische und pharmazeutische Prüfungsfragen (IMPP) für das Fach Biochemie*
since 2018	member of the *„Konzeptgruppe WISE“, Medizinische Fakultät Ulm*
since 2018	member of the *„AG Lehrforschung”, Medizinische Fakultät Ulm*
since 2018	member of the GMA committee „Wissenschaftliche Kompetenzen“

Reviews

International peer reviewed journals

Applied Biochemistry and Biotechnology
BMC Developmental Biology
BMC Medical Education
Development, Genes and Evolution
Experimental Cell Research
Frontiers in Molecular Neuroscience
Genesis
GMS Journal for Medical Education
International Journal of Biological Sciences

International Union of Biochemistry and Molecular Biology

Journal of Contemporary Medical Education

Ophthalmology

Plos One

Stem Cell International

The Open Psychology Journal

Further

Czech Science Foundation

Retina France

Publications

40 original publications
5 reviews
1 comment
1 book chapter
5 text books

21 H-index
29 i10-index
1511 Total citations (Aug 30th, 2020)

Original publications

40. Schneider A, Kühl M, **Kühl SJ (2019)** Longitudinal curriculum development: gradual optimizing of a biochemistry seminar. **GMS J. Med. Educ.** 36(6)

39. Schneider A, Kühl M, **Kühl SJ** (2019) Utilizing research findings in medical education: The testing effect within a flipped / inverted biochemistry classroom. **Med. Teach.** 41: 1245-51(IF 2018: 2,4)

38. **Kühl SJ**, Schneider A, Kestler HA, Toberer M, Kühl M, Fischer MR (2019) Investigating the self-study phase of an inverted biochemistry classroom – collaborative dyadic learning makes the difference. **BMC Med. Educ.** 19:64 (IF 2018: 1,5)

37. Guo Y, Dorn T, **Kühl SJ**, Linnemann A, Rothe M, Pfister AS, Vainio S, Laugwitz KL, Moretti A, Kühl M (2019) The Wnt inhibitor Dkk1 is required for maintaining the normal cardiac differentiation program in Xenopus laevis, **Dev. Biol.** 449:1-13 (IF 2018: 3,2)

36. Zawerton A, Yao B, Yeager JP, Pippucci T, Haseeb A, Smith JD, Wischmann L, **Kühl SJ**, Dean JCS, Pilz DT, Holder SE, McNeill A, Graziano C, Lefebvre V (2019) De novo SOX4 variants cause a neurodevelopmental disease associated with mild dysmorphism, **Am. J. Hum. Genet.** 104:246-59 (IF 2018: 9,9)

35. Flach H, Krieg J, Hoffmeister M, Dietmann P, Reusch A, Wischmann L, Kernl B, Riegger R, Oess S, **Kühl SJ** (2018) Nosip functions during vertebrate eye and cranial development, **Dev. Dyn.** 246:1070-82 (IF 2016: 2,5)

34. Seigfried FA, Dietmann P, Kühl M, **Kühl SJ** (2018) Expression of the adhesion G protein-coupled receptor A2 (adgra2) during Xenopus laevis development. **Gene Expr. Patterns**, 28:54-61 (IF 2016: 1,2)

33. **Kühl SJ**, Toberer M, Keis O, Tolks D, Fischer MR, Kühl M (2017) Concept and benefits of the Inverted Classroom method for a competency-based biochemistry course in the pre-clinical stage of a human medicine course of studies. **GMS J. Med. Educ.** 15;34(3)
32. Hoffmeister M, Krieg J, Ehrke A, Seigfried FA, Wischmann L, Dietmann P, **Kühl SJ**, Oess S (2017) Developmental neurogenesis in mouse and *Xenopus* is impaired in the absence of Nosip. **Dev. Biol.** 429(1):200-212 (IF 2016: 2,9)

31. Seigfried FA, Cizelsky W, Pfister AS, Dietmann P, Walther P, Kühl M, **Kühl SJ** (2017) Frizzled 3 acts upstream of Alcam during embryonic eye development. **Dev. Biol.** 426(1):69-83 (IF 2016: 2,9)

30. Hempel A, **Kühl SJ**, Rothe M, Rao Tata P, Sirbu IO, Vainio SJ, Kühl M (2017) The CapZ interacting protein Rcsd1 is required for cardiogenesis downstream of Wnt11a in *Xenopus laevis*. **Dev. Biol.** 424(1):28-39 (IF 2016: 2,9)

29. Kiem LM, Dietmann P, Linnemann A, Schmeisser MJ, **Kühl SJ** (2017) The Nedd4 binding protein 3 is required for anterior neural development in *Xenopus laevis*. **Dev. Biol.** 423(1):66-76 (IF 2016: 2,9)

28. Rothe M, Kanwal N, Dietmann P, Seigfried FA, Hempel A, Schütz D, Reim D, Engels R, Linnemann A, Schmeisser MJ, Bockmann J, Kühl M, Boeckers TM[+], **Kühl SJ[+]** (2017) An Epha4/Sipa1l3/Wnt pathway regulates eye development and lens maturation. **Development** 144(2):321-333, **[+]corresponding authors** (IF 2016: 5,8)

27. Rothe M, Monteiro F, Dietmann P, **Kühl SJ** (2016) Comparative expression study of sipa family members during early *Xenopus laevis* development. **Dev. Genes Evol.** 226(5):369-82 (IF 2016: 1,4)

26. Oswald F, Rodriguez P, Giaimo BD, Antonello ZA, Mira L, Mittler G, Thiel VN, Collins KJ, Tabaja N, Cizelsky W, Rothe M, **Kühl SJ**, Kühl M, Ferrante F, Hein K, Kovall RA, Dominguez M, Borggrefe T (2016) A phospho-dependent mechanism involving NCoR and KMT2D controls a permissive chromatin state at Notch target genes. **Nucleic Acid Res.** 44(10) (IF 2016: 10,2)

25. Hempel A, Pagnamenta AT, Blyth M, Mansour S, Mc Connell V, Kou I, Ikegawa S, Tsurusaki Y, Matsumoto N, Lo-Castro A, Plessis G, Albrecht B, Battaglia A, Taylor JC, Howard MF, Keays D, Sohal AS; DDD colllaboration, **Kühl SJ**, Kini U, McNeill A (2016) Deletions and de novo mutations of SOX11 are associated with a neurodevelopmental disorder with features of Coffin-Siris syndrome, **J. Med. Genet.** 53(3):152-62 (IF 2014: 5,4)

24. Dolnik A*, Kanwal N*, Mackert S*, Halbedl, Proepper C, Bockmann J, Schoen M, Boeckers TM, **Kühl SJ[+]**, Schmeisser MJ[+] (2016) Sipa1l3/SPAR3 is targeted to postsynaptic specializations and interacts with the Fezzin ProSAPiP/Lzts3, **J. Neurochem.** 136(1):28-35, *equal contribution, [+]corresponding authors (IF 2014: 4,3)

23. Dorn T*, Goedel A*, Lam JT*, Haas J, Tian Q, Herrmann F, Bundschu K, Dobreva G, Schiemann M, Dierschinger R, Guo Y, **Kühl SJ**, Sinnecker D, Lipp P, Laugwitz KL, Kühl M[+], Moretti A[+] (2015) Direct Nkx2-5 transcriptional repression of Isl1 controls cardiomyocyte subtype identity, **Stem Cells**, 33(4):1113-29, *equal contribution, [+]corresponding authors (IF 2014: 6,5)

22. Hempel A and **Kühl SJ** (2014) Comparative expression analysis of *cysteine-rich intestinal protein* family members *crip1, 2 and 3* during *Xenopus laevis* embryogenesis, **Int. J. Dev. Biol.** 58(10-12):841-9 (IF 2014: 1,9)
21. Cizelsky W*, Tata A*, Kühl M[+], **Kühl SJ[+]** (2014) The Wnt/JNK signaling target gene *alcam* is required for embryonic kidney development, **Development**, 141, 2064-74, *equal contribution, [+]corresponding authors (IF 2013: 6,4)

20. Guo Y*, **Kühl SJ***, Pfister A, 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** 9(1):e87294, *equal contribution (IF 2014: 3,2)

19. Schmeisser MJ, **Kühl SJ**, Schoen M, Beth NH, Weis TM, Grabrucker AM, Kühl M, Boeckers TM (2013) The Nedd4-binding protein 3 (N4BP3) is crucial for axonal and dendritic branching in developing neurons, **Neural Dev.** 8, 18 (IF 2013: 3,4)

18. Weidgang CE, Russel R, Tata PR, **Kühl SJ**, Illing A, Müller M, Lin Q, Brunner C, Boeckers TM, Bauer K, Kartiasari AER, Guo Y, Radenz M, Bernemann C, Weiß M, Seufferlein T, Zenke M, Iacovino M, Kyba M, Schöler HR, Kühl M, Liebau S, Kleger A (2013) Tbx3 directs cell-fate decision toward mesendoderm, **Stem Cell Rep.** 3, 248-65
17. Özhan G, Sezgin E, Wehner D, Pfister AS, **Kühl SJ**, Kagermeier-Schenk B, Kühl M, Schwille P and Weidinger G (2013) Lypd6 enhances Wnt/β-catenin signaling by promoting Lrp6 phosphorylation in raft plasma membrane domains, **Dev. Cell** 26, 331-45 (IF 2013: 10,4)

16. Cizelsky W, Hempel A, Tao S, Metzig M, Hollemann T, Kühl M, **Kühl SJ** (2013) Sox4 and Sox11 function during *Xenopus laevis* eye development, **Plos One**, 8(7):e69372 (IF 2013: 3,5)

15. Murugan S, Shan J, **Kühl SJ**, Tata A, Pietulä I, Kühl M and Vainio SJ (2012) WT1 and Sox11 regulate synergistically the promotor of the Wnt4 gene that encodes a critical signal for nephrogenesis, **Exp. Cell Res.** 318, 1134-45 (IF 2012: 3,6)

14. Herrmann F*, Bundschu K*, **Kühl SJ**, Kühl M (2011) Tbx5 overexpression favours a first heart field lineage in murine embryonic stem cells and in *Xenopus laevis* embryos, **Dev. Dyn.** 240, 2634-45, *equal contribution (IF 2012: 2,5)

13. Tao S, Kühl M, **Kühl SJ** (2011) Expression of periostin during *Xenopus laevis* embryogenesis, **Dev. Genes Evol.** 221, 247-54 (IF 2011: 1,8)

12. Tecza A, Bugner V, Kühl M, **Kühl SJ** (2011) Pescadillo homologue 1 and Peter Pan during *Xenopus laevis* pronephros development, **Biol. Cell**, 103, 483-98, cover image (IF 2011: 3,6)

11. Guo Y, Christine KS, Conlon F, **Gessert S**, Kühl M (2011) Expression analysis of epb41l4a during *Xenopus laevis* embryogenesis, **Dev. Genes Evol.** 221, 113-19 (IF 2011: 1,8)

10. Bugner V, Tecza A, **Gessert S**, Kühl M (2011) Peter Pan functions independent of its role in ribosome biogenesis during early eye and craniofacial cartilage development in *Xenopus laevis*, **Development**, 138, 2369-78 (IF 2011: 6,6)

9. **Gessert S,** Schmeisser M, Tao S, Boeckers TM Kühl M (2011) The spatio-temporal expression of ProSAP/Shank family members and their interaction partner LAPSER1 during *Xenopus laevis* development, **Dev. Dyn.** 240, 1528-36 (IF 2011: 2,5)

8. **Gessert S**, Bugner V, Tecza A, Pinker M, Kühl M (2010) FMR1/FXR1 and the miRNA pathway are required for eye and neural crest development, **Dev. Biol.** 341, 222-35 (IF 2010: 4,1)

7. **Gessert S** and Kühl M (2009) Comparative gene expression analysis and fate mapping studies suggest an early segregation of cardiogenic lineages in *Xenopus laevis*, **Dev. Biol.** 334, 395-408 (IF 2009: 4,4)

6. **Gessert S**, Maurus D, Kühl M (2008a) Repulsive guidance molecule A (RGM A) and its receptor Neogenin during neural and neural crest development of *Xenopus laevis*, **Biol. Cell**, 100, 659-77, cover image (IF 2008: 3,4)

5. **Gessert S**, Maurus D, Brade T, Pandur P, Kühl M (2008b) DM-GRASP/ALCAM/CD166 is required for morphogenesis and maintenance of cardiac identity in first heart field derived cells, **Dev. Biol.** 321, 150-61 (IF 2008: 4,4)

4. **Gessert S***, Maurus D*, Rössner A, Kühl M (2007) Pescadillo is required for *Xenopus laevis* eye development and neural crest migration. **Dev. Biol.** 310: 99-112 *equal contribution (IF 2007: 4,7)

3. Brade T, **Gessert S**, Kühl M, Pandur P (2007) The amphibian second heart field: *Xenopus Islet-1* is required for cardiovascular development. **Dev. Biol.** 311: 297-310 (IF 2007: 4,7)

2. Giamas G, Hirner H, Shoshiashvili L, Grothey G, **Gessert S**, Kühl M, Henne-Bruns D, Vorgias CE, Knippschild U (2007) Phosphorylation of CK1delta: Identification of Ser370 as the major phosphorylation site targeted by PKA in vitro and in vivo. **Biochem. J.** 406: 389-98 (IF 2007: 4,0)

1. Schuff M, Rössner A, Wacker SA, Donow C, **Gessert S**, Knöchel W (2007) FoxN3 is required for craniofacial and eye development of *Xenopus laevis*. **Dev. Dyn.** 236: 226-39 (IF 2007: 3,0)

Reviews

5. Nikendei C, Bugaj TJ, Nikendei F, **Kühl SJ**, Kühl M **(2020)** Climate change: causes, consequences, soliutions and public health care implication, **Z. Evid. Fortbild. Qual. Gesundhwes.** In press (IF 2019: 0,7)

4. **Kühl SJ** and Kühl M (2013) On the role of Wnt/β-catenin signaling in stem cells, **BBA general subjects**, 1820, 2297-306 (IF 2013: 3,8)

3. Pandur P, Sirbu IO, **Kühl SJ**, Philipp M, Kühl M (2013) Islet1 expressing cardiac progenitor cells: a comparison across species, **Dev. Genes Evol.** 223, 117-29 (IF 2013: 2,2)

2. **Kühl SJ** and Kühl M (2011) Improving cardiac function after injury: Are we a step closer? **Bioessays**, 33, 669-73 (IF 2011: 5,0)

1. **Gessert S** and Kühl M (2010) The multiple phases and faces of Wnt signaling during cardiac differentiation and development, **Circ. Res.** 107, 186-99 (IF 2010: 9,5)

Comment

1. **Kühl S** und Kühl M (2012) Nobelpreise 2012, Physiologie oder Medizin, **Naturwissenschaftliche Rundschau**, 12, 5-7

Book chapter

1. **Kühl S**, Kühl M (2014) Introduction of β-Catenin-independent Wnt signaling pathways, In: Hoppler S and Moon RT (eds) Wnt Signaling in Development and Disease: Molecular Mechanisms and Biological Functions. Pages 89-99, John Wiley & Sons, Ltd., Hoboken, New Jersey.

Text books

5. Linnemann A, **Kühl SJ** (Hrsg.) (2017) *Grundlagen der Licht- und Elektronenmikroskopie, UTB,* ***Ulmer Verlag***

4. Öchsner W, Estner C, **Kühl SJ** (2016) *Prüfungen mit Erfolg bestehen in den Life Sciences, UTB,* ***Ulmer Verlag***

3. ***Kühl SJ*** *und Kühl M (2016) Die Abschlussarbeit in den Life Sciences, UTB,* ***Ulmer Verlag***

2. ***Kühl SJ*** *und Kühl M (2012) Stammzellbiologie, UTB,* ***Ulmer Verlag***

1. Kühl M und ***Gessert S*** *(2010) Entwicklungsbiologie, UTB Basics,* ***Ulmer Verlag***