

Curriculum Vitae – Status: 11.2022

NAME Katja Schenke-Layland		POSITION Professor of Medical Technologies and Regenerative Medicine	
EDUCATION/ TRAINING			
INSTITUTION AND LOCATION	DEGREE(s)	YEAR(s)	FIELD(s) OF STUDY
UCLA, Cardiovascular Research Laboratories, Los Angeles/CA, USA	Postdoctoral Research Fellow	2005-2008	Stem Cell Research/ Cardiovascular Tissue Engineering
Children's Hospital Los Angeles, Saban Research Institute, Los Angeles/CA, USA	Postdoctoral Research Fellow	2004-2005	Cardiovascular Tissue Engineering
Friedrich Schiller University (FSU) Jena, Germany	Dr.rer.nat.	2001-2004 (23.9.2004)	Biology/ Cardiovascular Tissue Engineering
Friedrich Schiller University (FSU) Jena, Germany	M.Sc.	1995-2000	Biology, Sociology, Psychology

Personal Information:

Birth Date/Place: March 21st 1977; Eisenach, Germany
 Citizenship: Dual Nationality: German and U.S.A.
 Website: <http://www.schenke-layland-lab.com>
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**Professional Experience:**

since 04/2018 **Director**, Natural and Medical Sciences Institute at the University of Tübingen, Reutlingen, Germany (www.nmi.de/en)

since 11/2011 **Full Professor** (W3), Eberhard Karls University Tübingen (EKUT), Medical Faculty, Tübingen, Germany

since 01/2020 **CEO**, NMI-Technology Transfer (NMI-TT) GmbH, Reutlingen, Germany

since 01/2018 **Co-Editor-in-Chief**, Tissue Engineering, Part B (Mary Ann Liebert)

since 01/2012 **Executive Editor**, Advanced Drug Delivery Reviews (ADDR) (Elsevier)

08/2018-06/2022 **Project Scientist**, University of California Los Angeles (UCLA), Dept. of Medicine/ Cardiology, Cardiovascular Research Laboratories (CVRL), Los Angeles, CA, USA

11/2013-07/2018 **Adjunct Associate Professor**, UCLA, Dept. of Medicine/ Cardiology, Los Angeles, CA, USA

01/2016-11/2017 **Director** (*interim, executive*), Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Stuttgart, Germany

04/2013-11/2017 **Department Head**, Fraunhofer IGB, Dept. of Cell and Tissue Engineering, Stuttgart, Germany

01/2010-09/2013 **Visiting Associate Professor**, UCLA, Dept. of Medicine/ Cardiology, Los Angeles, CA, USA

01/2010-12/2014 **ATTRACT-Group Leader**, Fraunhofer IGB, Stuttgart, Germany

01/2010-03/2013 **Deputy Department Head**, Fraunhofer IGB, Dept. of Cell and Tissue Engineering, Stuttgart, Germany

11/2008-12/2009 **Assistant Research Professor**, UCLA, Dept. of Medicine/ Cardiology, Los Angeles, CA, USA

Overview of Peer-Reviewed Publications:

Peer-Reviewed Articles	Original Articles:	156
	Review Articles, Editorials, Commentaries, etc.:	29
	Senior/First Authorships:	62/24
	Book Chapters:	6
Citations <small>ISI Web of Science</small>	Sum of the times cited:	7071
Citations <small>Scopus</small>		7648
Total Impact Factor Points		830
h-Index <small>ISI Web of Science</small>		46
h-Index <small>Scopus</small>		48

Patents:

- “Glycosylated protein of an extra-cellular matrix for use in a method of treating diabetes in a human or animal subject”, EP3027201B1
- “A method and apparatus for providing a desired target protein expression cell line”, DE102017207262A1
- “Markers for human cardiac stem cells for regenerative therapies”, USA, *US Prov App Serial No. 61/828,502*
- “Glycosylated protein of an extra-cellular matrix for use in a method of treating an ischemic heart of a human or animal subject in need thereof”, PCT/EP2014/066497

Selected Awards:

- **Hilde Mangold Award**, German Stem Cell Network (GSCN) (2021)
- **CyberOne Business Plan Competition Finalist** (2016)
- **RPB Harold F. Spalter International Scholar Award** (2016)
- **Tissue Engineering and Regenerative Medicine International Society (TERMIS)-EU Young Investigator Award** (2014)
- **Young Investigator Morphological Sciences Award**, American Association of Anatomists (2010)
- **Best Young Researcher Award/ Family Klee Prize**, German Society for Biomedical Engineering (2004)
- **Teaching Award Best Module - Vital Implants**, Eberhard Karls University Tübingen (2016)
- **Teaching Award Best Module - Vital Implants**, Eberhard Karls University Tübingen (2014)
- **Teaching Award Best Module - Vital Implants**, Eberhard Karls University Tübingen (2013)

Academic Institutional Responsibilities

- 2019-present **University Senate**, EKUT, Germany
- 2018-present **Study Dean - Medical Technology**, Medical Faculty, EKUT, Germany
- 2016-2018 **Deputy Study Dean - Medical Technology**, Medical Faculty, EKUT, Germany
- 2016-present **Science Strategy Committee**, EKUT, Germany
- 2016-2018 **Klinikumsrat** (Hospital Senate), Medical Faculty, EKUT, Germany
- 2014-present **Deputy Chair - Technology Transfer Committee**, Medical Faculty, EKUT, Germany
- 2014-present **Science Committee**, Medical Faculty, EKUT, Germany
- 2014-2018 **Habilitation Committee**, Medical Faculty, EKUT, Germany
- 2013-2022 **Member Medical Faculty**, UCLA, USA
- 2012-present **Member Faculty of Science**, EKUT, Germany
- 2011-present **Member Medical Faculty**, EKUT, Germany

Selected National and International Elected Fellowships, Committees and Boards:

- 2022-present **Executive Board, National Academy of Science and Engineering** (acatech)
- 2021-present **Elected International Fellow of TERMIS** (FTERM)
- 2020-present **National Academy of Science and Engineering** (acatech)
- 2020-present **International Society for Matrix Biology Council Member**
- 2020-present **Deputy Chair, Innovationsallianz Baden-Württemberg e.V.** (InnBW)
- 2019-present **Speaker Forum Gesundheitsstandort Baden-Württemberg** for the Ministry of Economic Affairs Baden-Württemberg
- 2019-present **TERMIS-European Chapter Continental Council Member**
- 2018-present **German Central Ethics Committee for Stem Cell Research** (ZES)
- 2018-present **Editorial Board, Matrix Biology** (Elsevier)
- 2018-present **Editorial Board, Current Opinion in Biomedical Engineering** (Elsevier)
- 2017-present **German-Israeli Foundation (GIF) Advisory Board – Cancer and Biomedical Research Committee**
- 2017-present **Board Member, Health-i Initiative**
- 2017-present **TERMIS-European Chapter, Strategic Alliance Committee**
- 2016-present **Board Member, German Society for Matrix Biology e.V.** (DGMB)
- 2016-present **Editorial Board, Journal of 3D Printing in Medicine** (Future Medicine)
- 2015-present **Editorial Board, Tissue Engineering, Parts A, B and C** (Mary Ann Liebert)
- 2015-present **Fellow, European Alliance for Medical and Biological Engineering and Science** (EAMBES)
- 2014-present **Advisory Board, Journal of Materials Chemistry B** (Wiley)
- 2005-present **International Society for Stem Cell Research** (ISSCR)
- 2015-2017 **Fraunhofer Vintage Class**
- 2012-2015 **American Association of Anatomist (AAA) Postdoctoral Awards Committee**
- 2011-2015 **AAA Scientific Affairs Committee**

Conference Leadership:

- **Conference Host** (2018) Annual Meeting of the German Society of Matrix Biology (DGMB), Stuttgart, Germany
- **Conference Host** (2016) 9th European Elastin Meeting 2016, Stuttgart, Germany
- **Conference Host** (2015) bone-tec, Stuttgart, Germany
- **Conference Co-Host** (2013) Annual Meeting DGMB, Tübingen, Germany

Special Issue Editorships (selection):

- “Future Directions” **Advanced Drug Delivery Reviews** (2022)
- “Biomechanics” **Matrix Biology** 85-86 (2020)
- “The Future of Tissue Engineering” **Current Opinion in Biomedical Engineering** 6 (2018)
- “Extracellular Matrix Proteins and Mimics in Regenerative Medicine and Tissue Engineering” **Acta Biomaterialia** 52 (2017)
- “Strategies in Tissue Engineering” **Biotechnology Journal** 8(3) (2013)
- “From Tissue Engineering to Regenerative Medicine – The Potentials and the Pitfalls” **Advanced Drug Delivery Reviews** 63(4-5) (2011)

Invited Mentoring Programs:

- **Leibniz-Mentoring Program** (2017-2018)
- **TERMIS America SYIS** (2013), Atlanta, USA
- **TERMIS Europe SYIS** (2010), Galway, Ireland
- **MINT and WISP Program**, Germany

International Journal Reviewer (selection, alphabetically listed):

Acta Biomaterialia • Advanced Biomaterials • Advanced Drug Delivery Reviews • Advanced Functional Materials • American Journal of Transplantation • Biofabrication • Biomaterials • Biomedical Materials • Cardiovascular Pathology • Circulation • Circulation Research • eLife • EMBO Journal • International Journal of Pharmaceutics • Journal of Anatomy • Journal of Biophotonics • Journal of Investigative Dermatology • Journal of the Royal Society Interface • Journal of Structural Research • Macromolecular Bioscience • Matrix Biology • Molecular Therapy • PLoSOne • PNAS • Scientific Reports • Tissue Engineering Part A, B and C

International Grant Reviewer (selection):

- **Australia** – Australian Research Council (ARC)
- **Austria** – Austrian Science Fund (FWF)
- **Belgium** – Research Council: Katholieke Universiteit Leuven
- **Canada** – ALS Society of Canada
– Québec Consortium for Drug discovery (CQDM)
- **EU** – ERC Starting Grant and Consolidator Grant
- **Finland** – Academy of Finland
- **France** – L’Agence nationale de la recherche (ANR)
- **Germany** – Deutsche Forschungsgemeinschaft/ German Research Foundation (DFG)
– Bundesministerium für Bildung und Forschung/ Fed. Min. of Education and Research (BMBF)
– Alexander von Humboldt Foundation
– Helmholtz Association (Young Investigator Groups)
– VolkswagenStiftung
– Deutsche Krebshilfe
- **Iceland** – Icelandic Research Fund
- **Ireland** – Science Foundation Ireland (SFI)
- **Israel** – Israeli Ministry of Science, Technology and Space
– Advisor, German-Israeli Foundation (GIF)
- **Netherlands** – Dutch Technology Foundation STW
– Dutch Burns Foundation
- **UK** – Arthritis Research
– UK Regenerative Medicine Platform

Certifications:

- FELASA B and C (EU certified animal safety instructor/supervisor)
- Laser Safety Officer (VBG 93/BGV B2)
- Certificate, Training for project leaders in biological safety (§ 15 Abs. 2 GenTSV)

Other Notable Accomplishments:

- Handelsblatt magazine’s Top 100 Innovators in Germany (2017)
- Academia.net top 100 female scientists in Germany (2010)
- Nominee UCLA Chancellor’s Award for Postdoctoral Research (2007)

Ongoing Support as PI (only own contribution is listed):

Ministry of Economic Affairs Baden-Württemberg MDR/ IVDR Competency Center (NMI, PI/Coordinator)		2021-2022	€2.835.000
		<i>Project</i>	€3.361.270
Ministry of Economic Affairs Baden-Württemberg <i>SolidCAR-T</i> (NMI, Co-PI)		2021-2022	€1.666.800
Ministry of Economic Affairs Baden-Württemberg <i>Predictive diagnosis of immune-associated diseases for personalized medicine</i> (NMI, PI/Coordinator)		2020-2022	€4.309.464
DFG (Co-PI) <i>Cluster of excellence iFIT (EXC 2180)</i>	390900677	since 2019	~€180.000
DFG (Co-PI, Project A3) <i>Intraoperative multi-sensor tissue identification in oncology</i>	GRK 2543	since 2020	~€180.000
EU Horizon 2020-MSCA-ITN-EID <i>DELIVER</i> (EKUT)	812865	2019-2022	€505.576

Completed Support as PI:

Ministry of Economic Affairs Baden-Württemberg <i>Large Instrument Grant- Infrastructure for Corona-Research EFRE EVI-2014-2020</i> (NMI)		2020/2021	€2.000.000
DFG <i>Blood vessel tissue engineering</i> (EKUT)	SCHE701/14-1	2016-2020	€217.150
EU Horizon 2020 NMP-10-2014 <i>DRIVE</i> (EKUT)	645991	2015-2019	€679.153
Ministry of Economic Affairs Baden-Württemberg <i>Large Instrument Grant- Raman/CARS Microspectrometer</i> (NMI)	3-4332.62-NMI/65	2020	€700.000
University Hospital Teaching Program PROFIL		2020	€30.000
Ministry of Economic Affairs Baden-Württemberg <i>Large Instrument Grant</i>		2018	€700.000
Ministry of Economic Affairs Baden-Württemberg <i>Large Instrument Grant</i>		2018	€200.000
Fraunhofer MAVO <i>OptisCell</i> (Fh-IGB)	122610	2015-2018	€306.876
EU FP7 NMP3-SME-2013-604531 <i>AMCARE</i> (Fh-IGB)	604531	2014-2017	€733.000
DFG <i>Ice Free Heart Valve Cryopreservation</i> (EKUT)	SCHE701/10-1	2014-2017	€125.250
ZIM – AiF <i>Artificial Heart Development</i> (EKUT)	KF3349501CR4	2015-2017	€174.756
DFG Large Instrument Grant <i>Raman Microspectroscope</i>	INST 2388/64-1	01.2017	€195.000
Industry-on-campus Fonds, MWK Baden-Württemberg <i>Raman Spectroscopy for intraoperative tissue differentiation</i> (Fh-IGB/ IGVP)	83820131	2012-2016	€133.173
MWK Baden-Württemberg (EKUT)	33-729.55-3/214	2015-2016	€200.000
University Hospital Teaching Program PROFIL		2015	€30.000
BMBF-CIRM Collaborative Grant	0316059	2012-2015	€1.072.042
DFG Optical Cellular Reprogramming	SCHE701/7-1	2012-2015	€304.425
DFG Large Instrument Grant Fluorescence Microscope	INST 2388/34-1	05.2013	€127.758
DFG Large Instrument Grant 5D Multiphoton System	INST 2388/30-1	02.2013	€275.000
DFG Large Instrument Grant ImageStreamX	INST 2388/33-1	01.2013	€265.000
MWK Baden-Württemberg	SI-BW 01222-91	08.2011	€750.000
MWK Baden-Württemberg	33-729.55-3/214	2012-2014	€300.000
Fraunhofer Attract Group Leader Grant	Attract 692263	2010-2014	€2.704.413
DFG Research Grant, Co-Investigator	STO 359/7-1	2007-2010	€240.000
NIH-Ruth L. Kirschstein Training Grant	5T32HL007895-10	2007-2009	\$165.000
DFG - Postdoctoral Research Fellowship	SCHE 701/2-1	2005-2007	€52.800

Complete List of Peer-Reviewed Publications (without book chapters; *authors contributed equally):

2022

1. Green chemistry for biomimetic materials: Synthesis and electrospinning of high-molecular-weight polycarbonate-based nonisocyanate polyurethans. Visser D*, Bakhshi H*, Rogg K, Fuhrmann E, Wieland F, **Schenke-Layland K**, Meyer W, Hartmann H. ACS Omega *in press*
2. Antibody binding and ACE2 binding inhibition is significantly reduced for both the BA1 and BA2 omicron variants. Junker D, Becker M, Wagner TR, Kaiser PD, Maier S, Grimm TM, Griesbaum J, Marsall P, Gruber J, Traenkle B, Heinzel C, Pinilla YT, Held J, Fendel R, Kreidenweiss A, Nelde A, Maringer Y, Schroeder S, Walz JS, Althaus K, Uzun G, Mikus M, Bakchoul T, **Schenke-Layland K**, Bunk S, Haerberle H, Göpel S, Bitzer M, Renk H, Remppis J, Engel C, Franz AR, Harries M, Kessel B, Lange B, Strengert M, Krause G, Zeck A, Rothbauer U, Dulovic A, Schneiderhan-Marra N. Clin Infect Dis *in press*
3. Protein profiling of breast carcinomas reveals expression of immune-suppressive factors and signatures relevant for patient outcome. Ruoff F, Kersten N, Anderle N, Jerbi S, Stahl A, Koch A, Staebler A, Hartkopf A, Brucker SY, Hahn M, **Schenke-Layland K**, Schmees C, Templin MF. Cancers 14(18): 4542 (2022)
4. Establishment of Four Induced Pluripotent Stem Cell Lines from CD34+ Hematopoietic Stem and Progenitor Cells from a Patient Diagnosed with an Invasive Lobular Mammary Carcinoma. Keller AL, Binner A, **Schenke-Layland K**, Schmees C. Stem Cell Res 64: 102902 (2022)
5. Data-driven identification of biomarkers for in situ monitoring of drug treatment in bladder cancer organoids. Becker L, Fischer F, Fleck JL, Harland N, Herkommer A, Stenzl A, Aicher WK, **Schenke-Layland K**, Marzi J. Int J Mol Sci 23(13): 69956 (2022)
6. Autologous human immunocompetent white adipose tissue-on-chip. Rogal J, Roos J, Teufel C, Cipriano M, Xu R, Eisler W, Weiss M, **Schenke-Layland K**, Loskill P. Adv Sci (Weinh) 9: 2104451 (2022)
7. Organ-specific endothelial cell heterogeneity and its impact on regenerative medicine and biomedical engineering applications. Urbanczyk M, Zbinden A, **Schenke-Layland K**. Adv Drug Deliv Rev 186:114323 (Review) (2022)
8. Marker-independent monitoring of in vitro and in vivo degradation of supramolecular polymers applied in cardiovascular in situ tissue engineering. Marzi J, Munnig Schmidt EC, Brauchle EM, Wissing TB, Bauer H, Serrero A, Söntjens SHM, Bosman AW, Cox MAJ, Smits AIPM, **Schenke-Layland K**. Front Cardiovasc Med 9: 885873 (2022)
9. Raman microspectroscopy identifies biochemical activation fingerprints in THP-1- and PBMC-derived macrophages. Feuerer N, Carvajal Berrio DA, Billing F, Segan S, Weiss M, Rothbauer U, Marzi J, **Schenke-Layland K**. 10(5): 989 Biomedicines (2022)
10. Mapping human haematopoietic stem cells from haemogenic endothelium to birth. Calvanese V, Capellera-Garcia S, Ma F, Fares I, Liebscher S, Ng ES, Ekstrand S, Aguadé-Gorgorió J, Vavilina A, Lefaudeux D, Nadel B, Li JY, Wang Y, Lee LK, Ardehali R, Iruela-Arispe ML, Pellegrini M, Stanley EG, Elefanty AG, **Schenke-Layland K**, Mikkola HKA. Nature 604: 534-540 (2022)
11. Cell type-specific anti-adhesion properties of peritoneal cell treatment with plasma-activated media (PAM). Holl M, Rasch ML, Becker L, Keller AL, Schulze-Rhonhoff L, Ruoff F, Templin M, Keller S, Neis F, Keßler F, Andress J, Bachmann C, Krämer B, **Schenke-Layland K**, Brucker SY, Marzi J, Weiss M. Biomedicines 10(4): 927 (2022)
12. Noninvasive physical plasma as innovative and tissue-preserving therapy for women positive for cervical intraepithelial neoplasia. Marzi J, Stope MB, Henes M, Koch A, Wenzel T, Holl M, Layland SL, Neis F, Bösmüller H, Ruoff F, Templin M, Krämer B, Staebler A, Barz J, Carvajal Berrio DA, Enderle M, Loskill PM, Brucker SY, **Schenke-Layland K**, Weiss M. Cancers 14(8): 1933 (2022)
13. Development of a bi-layered cryogenic electrospun polylactic acid scaffold to study calcific aortic valve disease in a 3D co-culture model. Stadelmann K, Weghofer A, Urbanczyk M, Maulana TI, Loskill P, Jones PD, **Schenke-Layland K**. Acta Biomaterialia 140: 364-378 (2022)
14. Arachnoid membrane as a source of sphingosine-1-phosphate that regulates mouse middle cerebral artery tone. Jiménez-Altayó F, Marzi J, Galán M, Dantas AP, Ortega ML, Rojas S, Egea G, **Schenke-Layland K**, Jiménez-Xarrié E, Planas A. J Cereb Blood Flow Metab 42(1): 162-174 (2022)
15. Basement membrane proteins improve human islet survival in hypoxia: implications for islet inflammation. Bandhorst D, Brandhorst H, Layland S, Acreman S, **Schenke-Layland K**, Johnson PRV. Acta Biomater 137: 92-102 (2022)

2021

16. Lipidome profiling with Raman microspectroscopy identifies macrophage response to surface topographies of implant materials. Feuerer N, Marzi J, Brauchle EM, Carvajal Berrio DA, Billing F, Weiss M, Jakobi M, Schneiderhan-Marra N, Shipp C, **Schenke-Layland K**. Proc Natl Acad Sci USA 118(52): e2113694118 (2021)
17. Three water restriction schedules used in rodent behavioral tasks transiently impair growth and differentially evoke a stress hormone response without causing dehydration. Vasilev D, Havel D, Liebscher S, Slesiona-Kuenzel S, Logothetis N, **Schenke-Layland K**, Totah N. eNeuro 10.1523/ENEURO.0424-21.2021 (2021)
18. Long-term repair of porcine articular cartilage using cryopreservable, clinically compatible human embryonic stem cell-derived chondrocytes. Petrigliano FA, Liu NQ, Lee S, Tassej J, Sarkar A, Lin Y, Li L, Yu Y, Geng D, Zhang J, Shkhyan R, Bogdanov J, Van Handel B, Ferguson GB, Lee Y, Hinderer S, Tseng KC, Kavanaugh A, Crump JG, Pyle AD, **Schenke-Layland K**, Billi F, Wang L, Lieberman J, Hurtig M, Evseenko D. NPJ Regen Med 6(1): 77 (2021)

19. Hyaluronic acid-functionalized hybrid gelatin-poly-L-lactide scaffolds with tunable hydrophilicity. Piccirillo G, Feuerer N, Carvajal-Berrio D, Layland SL, Hinderer S, Bochicchio B, **Schenke-Layland K**. *Tissue Eng Part C Methods* 27(11): 589-604 (2021)
20. Targeted protein profiling of in vivo NIPP-treated tissues using DigiWest Technology. Ruoff F, Henes M, Templin M, Enderle M, Bösmüller H, Wallwiener D, Brucker SY, **Schenke-Layland K**, Weiss M. *Appl. Sci.* 11(23): 11238 (2021)
21. Raman imaging and fluorescence lifetime imaging microscopy for diagnosis of cancer state and metabolic monitoring. Becker L, Janssen N, Layland SL, Mürdter TE, Nies AT, **Schenke-Layland K**, Marzi J. *Cancers* 13: 5682 (2021) (**Review**)
22. Inflammatory and regenerative processes in bioresorbable synthetic pulmonary valves up to two years in sheep: Spatiotemporal insights augmented by Raman microspectroscopy. De Kort BJ, Marzi J, Brauchle E, Lichauco AM, Bauer HS, Serrero A, Dekker S, Cox MAJ, Schoen FJ, **Schenke-Layland K**, Bouten CVC, Smits AIPM. *Acta Biomater* 135: 243-259 (2021)
23. Distinct effects of heparin and interleukin-4 functionalization on macrophage polarization and in situ arterial tissue regeneration using resorbable supramolecular vascular grafts in rats. Bonito V, Koch SE, Krebber MM, Carvajal-Berrio DA, Marzi J, Duijvelshoff R, Lurier EB, Buscone S, Dekker S, de Jong SMJ, Mes T, Vaessen KRD, Brauchle EM, Bosman AW, **Schenke-Layland K**, Verhaar MC, Dankers PYW, Smits AIPM, Bouten CVC. *Adv Healthc Mater* 10(21): e21011103 (2021)
24. The foreign body response to an implantable therapeutic reservoir in a diabetic rodent model. Beatty R, Lu CE, Marzi J, Levey RE, Carvajal-Berrio D, Lattanzi G, Wylie R, O'Connor R, Wallace E, Gherzi G, Salamone M, Dolan E, Layland S, **Schenke-Layland K**, Duffy G. *Tissue Eng Part C Methods* 27(10): 515-528 (2021)
25. Complement factor H loss in RPE cells causes retinal degeneration in a human RPE-porcine retinal explant co-culture model. Armento A, Murali A, Marzi J, Almansa-Garcia AC, Arango-Gonzalez B, Kilger E, Clark SJ, **Schenke-Layland K**, Ramlogan-Steel CA, Stell JC, Ueffing M. *Biomolecules* 11(11): 1621 (2021)
26. Imaging of α -Synuclein aggregates in a rat model of Parkinson's disease using Raman micro-spectroscopy. Sevgi F, Brauchle EM, Carvajal Berrio DA, **Schenke-Layland K**, Casadei N, Salker MS, Riess O, Singh Y. *Front Cell Dev Biol* 9: 664365 (2021)
27. [Organoids for the advancement of intraoperative diagnostic procedures.] Harland N, Amend B, Lipke N, Brucker SY, Fend F, Herkommer A, Lensch H, Sawodny O, Schäffer TE, **Schenke-Layland K**, Tarin Sauer C, Aicher W, Stenzl A. *Urologe A* 60(9): 1159-1166 (2021) (**Review**)
28. Generation and characterization of the human induced pluripotent stem cell line NMi010-A from peripheral blood mononuclear cells of a healthy 49-year old male individual. Keller AL, Binner A, Breitmeyer R, Vogel S, Anderle N, Rothbauer U, **Schenke-Layland K**, Schmees C. *Stem Cell Res* 54: 102427 (2021)
29. Integration of electrospun membranes into low-absorption thermoplastic organ-on-chip. Chuchuy J, Rogal J, Ngo T, Stadelmann K, Antkowiak L, Achberger K, Liebau S, **Schenke-Layland K**, Loskill P. *ACS Biomater Sci Eng* 7(7): 3006-3017 (2021)
30. Argyrin F treatment-induced vulnerabilities lead to a novel combination therapy in experimental glioma. Walter B, Canjuga D, Yüz SG, Ghosh M, Bozko P, Przystal JM, Govindarajan P, Anderle N, Keller, AL, Tatagiba M, **Schenke-Layland K**, Rammensee HG, Stevanovic S, Malek NP, Schmees C, Tabatabai G. *Advanced Therapeutics* 2100078 (2021)
31. Human heart-forming organoids recapitulate early heart and foregut development. Drakhlis L, Biswanath S, Farr CM, Lupanow V, Teske J, Ritzenhoff K, Franke A, Manstein F, Bolesani E, Kempf H, Liebscher S, **Schenke-Layland K**, Hegermann J, Nolte L, Meyer H, de la Roche J, Thiemann S, Wahl-Schott C, Martin U, Zweigerdt R. *Nat Biotechnol* 39(6): 737-746 (2021)
32. Multiplexed serum antibody screening platform using virus extracts from endemic coronaviridae and SARS-CoV-2. Fink S, Ruoff F, Stahl A, Becker M, Kaiser P, Traenkle B, Junker D, Weise F, Ruetalo N, Hörber S, Peter A, Nelde A, Walz J, Krause G, Baillot A, **Schenke-Layland K**, Joos TO, Rothbuer U, Schneiderhan-Marra M, Schindler M, Templin MF. *ACS Infect Dis* 7(6): 1596-1606 (2021)
33. Raman microspectroscopy and Raman imaging reveal biomarkers specific for thoracic aortic aneurysms. Sugiyama K^{*1}, Marzi J^{*1}, Alber J, Brauchle EM, Ando M, Yamashiro Y, Ramkhelawon B, **Schenke-Layland K**^{*2}, Yanagisawa H^{*2}. *Cell Reports Medicine* 2: 100261 (2021)
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