

Curriculum Vitae – Status: 09.2024

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>
 Work Addresses: [Eberhard Karls University Tübingen](#)
[Institute of Biomedical Engineering](#)
[Dept. for Medical Technologies and Regenerative Medicine](#)
 Silcherstrasse 7/1, 72076 Tübingen, Germany
[NMI Natural and Medical Sciences Institute at the University of Tübingen](#)
 Markwiesenstr. 55, 72770 Reutlingen, Germany

Phone: +49 7071-29-85206 (assistant - Diana Holzer);
 +49 7121 5153037 (assistant - Ira Digel)

Work E-Mail: katja.schenke-layland@uni-tuebingen.de
katja.schenke-layland@nmi.de

ORCID: <https://orcid.org/0000-0001-8066-5157>

**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 **Visiting Project Scientist/Scholar**, 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

01/2016-03/2018 **Director** (interim, executive), Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Stuttgart, Germany

04/2013-03/2018 **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:	178
	Review Articles, Editorials, Commentaries, etc.:	33
	Senior/First Authorships:	68/25
	Book Chapters:	6
Citations <small>Web of Science</small>	Sum of the times cited:	8,993
Citations <small>Scopus</small>		10,077
Total Impact Factor Points		1045
h-Index <small>Web of Science</small>		51
h-Index <small>Scopus</small>		54

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 Research Awards/Prizes and Teaching Awards:

- **Rosalind Franklin Society Awards in Science** (2022)
- **Hilde Mangold Award**, German Stem Cell Network (GSCN) (2021)
- **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)

Leadership I: Selected Academic Institutional Responsibilities and Affiliations

2024-present	University Council of the Reutlingen University, Germany
2019-present	University Senate , Elected Member of the Medical Faculty, EKUT, Germany
2018-present	Dean of Studies - Medical Technology , Medical Faculty, EKUT, Germany
2018-present	Committee for Core Facilities , Member (<i>NMI</i>), EKUT, Germany
2016-present	Committee for Research Strategy and Coordination , Member (<i>Fh-IGB²⁰¹⁶⁻²⁰¹⁸</i> , <i>NMI^{since 2018}</i>), EKUT, Germany
2014-present	Task Force Technology Transfer, Deputy Chair , Medical Faculty, EKUT, Germany
2014-present	Research Commission , Member, Medical Faculty, EKUT, Germany
2012-present	Member of the Faculty of Science , EKUT, Germany
2011-present	Member of the Medical Faculty , EKUT, Germany
2016-2018	Deputy Dean of Studies - Medical Technology , Medical Faculty, EKUT, Germany
2016-2018	Klinikumsrat (Hospital Senate) , Medical Faculty, EKUT, Germany
2014-2018	Habilitation Committee , Medical Faculty, EKUT, Germany
2013-2022	Member David Geffen School of Medicine/ Medical Faculty , UCLA, USA

Leadership II: Selected National and International Elected/ Awarded Fellowships, Committees and Boards

2022-present	Executive Board, National Academy of Science and Engineering (acatech)
2022-present	Jury, State Research Award, Landesforschungspreis Baden-Württemberg , Ministry of Science, Research and Arts Baden-Württemberg
2021-present	International Fellow of TERMIS (FTERM)
2020-present	Member, National Academy of Science and Engineering (acatech)
2020-present	Council Member, International Society for Matrix Biology (ISMB)
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
2018-present	Deputy Chair (Biology), 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)
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)
2016-2024	Board Member, German Society for Matrix Biology e.V. (DGMB)
2018-2024	TERMIS-European Chapter Continental Council Member
2017-2024	Board Member, Health-i Initiative
2017-2024	TERMIS-European Chapter, Strategic Alliance Committee
2017-2022	German-Israeli Foundation (GIF) Advisory Board – Cancer and Biomedical Research Committee
2016-2018	Member, Fraunhofer Alliance for Life Sciences
2015-2017	Fraunhofer Vintage Class, Fraunhofer-Gesellschaft
2012-2015	American Association of Anatomist (AAA) Postdoctoral Awards Committee
2011-2015	AAA Scientific Affairs Committee

Leadership III: Scientific Advisory Boards / Board of Trustees

2023-present	International Scientific Advisory Board, MERLN , Institute for Technology-Inspired Regenerative Medicine, Maastricht University, The Netherlands
2022-present	International Scientific Advisory Board, CURAM , SFI Research Centre for Medical Devices, University of Galway, Ireland
2021-present	Board of Trustees, Fraunhofer Institute for Mechanics of Materials IWM , Freiburg, Germany
2021-present	Scientific Advisory Board, Leibniz Institute for Interactive Materials DWI , Aachen, Germany
2020-present	Board of Trustees, Fraunhofer Institute for Photonic Microsystems IPMS , Dresden, Germany
2019-present	Board of Trustees, Hertie Institute for Clinical Brain Research (HIH) , Tübingen, Germany
2017-present	Scientific Advisory Council, Leibniz Institute of Photonic Technology IPHT , Jena, Germany
2018-2021	Board of Trustees, Center for Art and Media - ZKM , Karlsruhe, Germany

Leadership IV: Invited Mentoring Programs for Early-Stage Researchers

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

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)**

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):

DFG EXC 2180 (Co-PI) <i>Cluster of excellence iFIT</i>	390900677	since 2019	~€325.000
DFG GRK 2543 (Co-PI, Project A3) <i>Intraoperative multi-sensor tissue identification in oncology</i>	40947457	2020-2029	~€466.830
EU Horizon 2021-MSCA-ITN-DN-01 <i>flIMAGIN3D (EKUT)</i>	101073507	2023-2026	€260.539
University Hospital Teaching Program PROFIL		2023-2024	€30.000

Completed Support as PI:

EU Horizon 2020-MSCA-ITN-EID <i>DELIVER (EKUT)</i>	812865	2019-2022	€505.576
Ministry of Economic Affairs Baden-Württemberg MDR/ IVDR Competency Center (NMI, PI/Coordinator)		2021-2022 <i>Project</i>	€2.835.000 €3.361.270
Ministry of Economic Affairs Baden-Württemberg <i>SolidCAR-T (NMI, Co-PI)</i>		2021-2022	€1.666.800
Ministry of Economic Affairs Baden-Württemberg <i>Predictive diagnosis of immune-associated diseases for personalized medicine (NMI, PI/Coordinator)</i>		2020-2022	€4.309.464

Ministry of Economic Affairs Baden-Württemberg <i>Large Instrument Grant- Infrastructure for Corona- Research EFRE EVI-2014-2020 (NMI)</i>		2020/2021	€2.000.000
DFG <i>Blood vessel tissue engineering (EKUT)</i>	SCHE701/14-1	2016-2020	€217.150
EU Horizon 2020 NMP-10-2014 <i>DRIVE (EKUT)</i>	645991	2015-2019	€679.153
Ministry of Economic Affairs Baden-Württemberg <i>Large Instrument Grant- Raman/CARS Microspectrometer (NMI)</i>	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 (Fh-IGB)</i>	122610	2015-2018	€306.876
EU FP7 NMP3-SME-2013-604531 <i>AMCARE (Fh-IGB)</i>	604531	2014-2017	€733.000
DFG <i>Ice Free Heart Valve Cryopreservation (EKUT)</i>	SCHE701/10-1	2014-2017	€125.250
ZIM – AiF <i>Artificial Heart Development (EKUT)</i>	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 (Fh-IGB/ IGVP)</i>	83820131	2012-2016	€133.173
MWK Baden-Württemberg <i>(EKUT)</i>	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):

2024

- Heterogeneity of endothelial cells impacts the functionality of human pancreatic in vitro models. Urbanczyk M, Abuhelou A, Köninger M, Jeyagaran A, Carvajal-Berrio D, Kim E, Marzi J, Loskill P, Layland SL, **Schenke-Layland K**. Tissue Eng Part A (2024) *in press*
- Targeting Cyclophilin A in the cardiac microenvironment preserves heart function and structure in failing hearts. Sigle M, Rohlfing AK, Cruz Santos M, Kopp T, Krutzke K, Gidlund V, Kollotzek F, Marzi J, von Ungern-Sternberg S, Poso A, Heikenwälder M, **Schenke-Layland K**, Seizer P, Möllmann J, Marx N, Feil R, Feil S, Lukowski R, Borst O, Schäffer TE, Müller KAL, Gawaz MP, Heinzmann D. Cir Res 135(7): 758-773 (2024)
- Metabolic syndrome-associated murine aortic wall stiffening is associated with premature elastic fibers aging. Vanalderwert L, Henry A, Wahart A, Carvajal Berrio DA, Brauchle EM, El Kaakour L, **Schenke-Layland K**, Brinckmann J, Steenbock H, Debelle L, Six I, Faury G, Jaisson S, Gillery P, Durlach V, Sartelet H, Maurice P, Bennisroune A, Martiny L, Duca L, Romier B, Blaise S Am J Physiol Cell Physiol 327(3): C698-C715 (2024)
- MYCT1 controls environmental sensing in human hematopoietic stem cells. Aguadé-Gorgorió J, Jami-alahmadi Y, Calvanese V, Kardouh M, Fares I, Johnson H, Rezek V, Ma F, Magnusson M, Wang Y, Shin JE, Nance KJ, Goodridge HS, Liebscher S, **Schenke-Layland K**, Crooks GM, Wohlschlegel JA, Mikkola HKA. Nature 630(8016): 412-420 (2024)

5. Forward programming of hiPSCs towards beta-like cells using Ngn3, Pdx1, and MafA. Jeyagaran A, Urbanczyk M, Layland SL, Weise F, **Schenke-Layland K**. *Sci Rep* 14(1): 13608 (2024)
6. Characteristics associated with COVID-19 breakthrough infections after booster vaccination in healthcare workers: Insights from the TüSeRe:exact Study. Uzun G, Bareiß A, Becker M, Althaus K, Dulovic A, Junker D, **Schenke-Layland K**, Martus P, Borst O, Schneiderhan-Marra N, Bakchoul T. *J Clin Med* 13(6): 1571 (2024)
7. Deciphering UVA/Riboflavin collagen crosslinking: A pathway to improve biomedical materials. Fan L, Jung O, Herrmann M, Shirokikh M, Stojanovic S, Najman S, Körte F, Xiong X*, **Schenke-Layland K***, Barbeck M*. *Adv Funct Mater* 2401742 (2024)
8. Human tissue-resident peritoneal macrophages reveal resistance towards oxidative cell stress induced by non-invasive physical plasma. Schultze-Rhönhof L, Marzi J, Carvajal Berrio DA, Holl M, Braun T, Schäfer-Ruoff F, Andress J, Bachmann C, Templin M, Brucker SY, **Schenke-Layland K**, Weiss M. *Front Immunol* 15: 1357340 (2024)
9. Functionally-instructed modifiers of response to ATR inhibition in experimental glioma. Walter B, Hirsch S, Kuhlburger L, Stahl A, Schnabel L, Wisser S, Haeusser LA, Tsiami F, Plöger S, Aghaallaei N, Dick AM, Skokowa J, Schmees C, Templin M, **Schenke-Layland K**, Tatagiba M, Nahnsen S, Merk DJ, Tabatabai G. *J Exp Clin Cancer Res* 43(1): 77 (2024)
10. Microphysiological pancreas-on-chip platform with integrated sensors to model endocrine function and metabolism. Schlünder K, Cipriano M, Zbinden A, Fuchs S, Mayr T, **Schenke-Layland K**, Loskill P. *Lab Chip* 24(7): 2080-2093 (2024)
11. 30 Years of Tissue Engineering. Fisher JP, Mikos AG, **Schenke-Layland K**, Shin H, Jansen JA, Wang X. *Tissue Eng Part A* 30 (1-2): 3-4 (2024) (**Editorial**)
12. The extracellular matrix as hallmark of cancer and metastasis: from biomechanics to therapeutic targets. Sleeboom JJF, van Tienderen GS, **Schenke-Layland K**, van der Laan LJW, Khalil AA, Verstegen MMA. *Science Transl Med* 16(728):eadg3840 (2024) (**Review**)
13. "Future Directions" – Novel breakthrough developments in the fields of Drug Development & Delivery, and Regenerative Medicine. **Schenke-Layland K**, MacKay A. *Adv Drug Deliv Rev* 205: 115159 (2024) (**Editorial**)

2023

14. On the reproducibility of extrusion-based bioprinting: round robin study on standardization in the field. Grijalva Garces D, Strauß S, Gretzinger S, Schmieg B, Juengst T, Groll J, Meinel L, Schmidt I, Hartmann H, **Schenke-Layland K**, Brandt N, Selzer M, Zimmermann S, Koltay P, Southan A, Tovar GEM, Schmidt S, Weber A, Ahlfeld T, Gelinsky M, Scheibel T, Detsch R, Boccaccini AR, Naolou T, Lee-Thedieck C, Willems C, Groth T, Allgeier S, Köhler B, Friedrich T, Briesen H, Buchholz J, Paulus D, von Gladiss A, Hubbuch J. *Biofabrication*. 16(1): 015002 (2023)
15. Translating genomic tools to Raman spectroscopy analysis enables high-dimensional tissue characterization on molecular resolution. Sigle M, Rohlfing AK, Kenny M, Scheuermann S, Sun N, Graefßner U, Haug V, Sudmann J, Seitz C, Heinzmann D, **Schenke-Layland K**, Maguire PB, Walch A, Marzi J, Gawaz MP. *Nat Commun* 14(1):5799 (2023)
16. Breast cancer patient-derived microtumors resemble tumor heterogeneity and enable protein-based stratification and functional validation of individualized drug treatment. Anderle N, Schäfer-Ruoff F, Staebler A, Kersten N, Koch A, Önder C, Keller AL, Liebscher S, Hartkopf A, Hahn M, Templin M, Brucker SY, **Schenke-Layland K**, Schmees C. *J Exp Clin Cancer Res* 42(1):210 (2023)
17. Exploring the relationship between epigenetic DNA methylation and cardiac fibrosis through Raman microspectroscopy. Becker L, Montes-Mojarro IA, Layland SL, Nsair A, Fend F, Marzi J, **Schenke-Layland K**. *Am J Physiol Cell Physiol* 325(1): C332-C343 (2023)
18. Monitoring the macrophage response towards biomaterial implants using label-free imaging. Lu Chuan-en, Levey RE, Ghersi G, Schueller N, Liebscher S, Layland SL, **Schenke-Layland K**, Duffy GP, Marzi J. *Materials Today Bio* 21: 100696 (2023)
19. Raman Microspectroscopy Identifies Fibrotic Tissues in Collagen-related Disorders via Deconvoluted Collagen Type I Spectra. Becker L*, Lu C*, Montes-Mojarro IA, Layland SL, Khalil S, Nsair A, Duffy GP, Fend F, Marzi J, **Schenke-Layland K**. *Acta Biomater* 162: 278-291 (2023)
20. Electrospinning of collagen: Enzymatic and spectroscopical analyses reveal solvent-independent disruption of the triple-helical structure. Visser D, Rogg K, Fuhrmann E, Marzi J, **Schenke-Layland K**, Hartmann H. *J Mater Chem B* 11(10): 2207-2218 (2023)
21. The use of collagen-based materials in bone tissue engineering. Fan L, Ren Y, Emmert S, Vuckovic I, Stojanovic S, Najman S, Schnettler R, Barbeck M, **Schenke-Layland K***, Xiong X*. *Int J Mol Sci* 24(4): 3744 (**Review**) (2023)
22. Bright and photostable TADF-emitting zirconium(IV) pyridinedipyrroloide complexes: efficient dyes for decay time-based temperature sensing and imaging. Russegger A, Debruyne AC, Carvajal Berrio D, Fuchs S, Marzi J, **Schenke-Layland K**, Dmitriev RI, Borisov SM. *Adv Optical Mat* 2202720 (2023)
23. Antibody binding and ACE2 binding inhibition is significantly reduced for both the BA1 and BA2 omicron variants. Junker D*¹, Becker M*¹, Wagner TR*¹, Kaiser PD, Maier S, Grimm TM, Griesbaum J, Marsall P, Gruber J, Traenkle B, Heinzl 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, Haeberle 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*², Schneiderhan-Marra N*². *Clin Infect Dis* 76(3): e240-e249 (2023)

24. Decorin improves human pancreatic β -cell function and regulates ECM expression in vitro. Urbanczyk M*, Jeyagaran A*, Zbinden A, Lu C, Marzi J, Kuhlburger L, Nahnsen S, Layland SL, Duffy G, **Schenke-Layland K**. *Matrix Biology* 115: 160-183 (2023)
25. Generation and characterization of three induced pluripotent stem cell lines from an 86-year old female individual diagnosed with an invasive lobular mammary carcinoma. Keller AL, Greis D, Eybe J, Plöger S, Weiss M, Koch A, Brucker SY, **Schenke-Layland K**, Schmees C. *Stem Cell Res* 66:102988 (2023)
26. Vaccine side effects in health workers after vaccination against SARS-CoV-2: Data from TüSeRe:exact study. Bareiß A, Uzun G, Mikus M, Becker M, Althaus K, Schneiderhan-Marra N, Fürstberger A, Schwab JD, Kestler HA, Holderried M, **Schenke-Layland K**, Bakchoul T. *Viruses* 15(1): 65 (2023)

2022

27. 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* 7(44): 39772-39781 (2022)
28. 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)
29. 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)
30. A platform of patient-derived microtumors identifies individual treatment responses and therapeutic vulnerabilities in ovarian cancer. Anderle N, Koch A, Gierke B, Keller AL, Staebler A, Hartkopf A, Brucker SY, Pawlak M, **Schenke-Layland K**, Schmees C. *Cancers* 14(12): 2895 (2022)
31. 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)
32. 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)
33. 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)
34. 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)
35. 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**. *Biomedicines* 10(5): 989 (2022)
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